# A Cross-Comparison of Perceptions of Online Education: A Case Study of an Online MBA Program

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# ABSTRACT

A Cross-Comparison of Perceptions of Online Education: A Case Study of an Online MBA Program
Nikolaos Linardopoulos
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This study examined the perceptions of online education held by internal stakeholders (students, faculty and administration) of an online MBA program at a major urban university. Specifically, factors that affect the students' decision to enroll in an online program as well as the variables that affect the faculty decision to teach online courses were examined. In addition, the overall attitude towards online education held by students, faculty and the administration was examined. The results indicate that students and the administration view online education very favorably. Faculty members, while also endorsing online education conveyed the need for more ways to interact with students and expressed workload concerns. Implications and possible further research areas for the development of online programs and courses in the future are discussed.

# CHAPTER 1: INTRODUCTION

## Background

According to Gerald Heeger (2007) every society looks for a "tipping point", when attempting to describe the moment that a phenomenon becomes pervasive in a society. Heeger further argues that the role of distance education in the US today is becoming a pervasive topic for our society. Heeger presents examples where government institutions (armed services), high schools and colleges have been increasing programs and online courses for students who would not otherwise be able to enroll in classes. He further states that "In an era marked by rapidly escalating education costs and increasing social complexity, it isn't surprising that distance learning would become a pervasive topic of our time" (Heeger, 2007). Heeger attributes the growth of distance learning offerings to technological and societal changes as well as consumer demand for alternate modes of educational offerings that saves time and travel. To further elucidate this context, a brief history of distance learning is described below.

## History of Distance Education and E-learning Today

The first attempt for distance learning education can be traced back to 1881 through the Chautauqua Correspondence College (Heeger, 2007). To minimize the need for travelling to off-campus locations (for both faculty and students) universities started to make use of available technology (telephone, video and television) in order to deliver educational content for students who found it difficult to commute to the on-campus locations (Meyer, 2002). The driving force behind the distance learning education initiatives of the late 1800's was to enable the underserved populations of that era (blue

collar workers, women) to access higher education programs as rigorous and compelling as the ‘on campus’ programs (Joerns et al, 2006).

The current popularity of online education in the United States is directly linked to the developments of computer technology and its service to populations who have the need for learning but are limited in their ability to commute long distances. Specifically, the use of technology for educational and training purposes can be traced back to the 1940’s during World War II where the US government used training films for the service people stationed around the world (Government of Canada, 2004). Even though evidence of computer- assisted instruction dates back to the mid-1980’s, it was the invention and proliferation of the internet and associated technologies in the early 1990’s that blended traditional face-to-face classroom instruction with technology. By the late 1990’s, higher education institutions had moved from a blended learning system where technology was used to support face-to-face classroom instruction to the development and delivery of programs and courses offered entirely online.

The advent of technology via the increased access and availability of the internet medium has contributed to today’s changing marketplace of distance education in two ways; i. an increased number of adult learners need training or professional development to further their careers and ii. a large number of students who can enroll in college programs and courses even though they live away from the physical location of the institution (Meyer, 2002). According to Joerns et al (2006), contemporary online education allows for “opportunistic learning” during which the specific educational needs for professional activities and tasks are addressed. Joerns et al (2006) further argue that

online distance education provides an alternative for the individuals for whom on-campus learning is unavailable or undesirable (Joern et al, 2006).

The growth of online education in the US and abroad has been exponential. According to the Sloan Consortium, in the fall of 2007, almost 4 million students in the US were enrolled in at least one online course. This number represents an increase of 12% (or about 450.000 students) compared to the year before. One report states that more than 96% of the nation's higher education institutions offer some form of online learning opportunities (Ebersole, 2007). Furthermore, more than 80% of the Doctoral/Research institutions include coursework or entire programs offerings online. The changing culture of the workplace where there is a need for employees to be part of a knowledge-driven society and the need to remain constantly up-to-date in their field is a major contributing factor to the growth of online education (O'Neill et al, 2004). The need for the informed employee also raises the demand for continuous and easily accessible educational opportunities, which can be met through the offerings of online courses and programs. In light of these developments, it is not surprising that online education offerings worldwide have witnessed a remarkable growth rate during the last five years.

The proliferation of online offerings, which as discussed above is based on the need to satisfy an unmet need for access to higher education, has raised several questions regarding educational quality, learning outcomes, student, faculty and university administration experiences, and employers perspectives. Several studies have looked at whether the educational quality and learning outcomes of online instruction are similar compared to the face-to-face instruction (Allen et al, 2002; Bernard et al, 2004; Coates,

2004; Fortune et al, 2006; Neuhauser, 2002). In addition, key stake-holders (university administrators and potential employers) have been surveyed regarding their perceptions of the value of online education. The Sloan Consortium indicates that 45% of the chief academic officers surveyed believe that online and face-to-face education methods have similar learning outcomes. Ken Hartman (2007) cites a 2005 survey of human resources representatives according to which more than 62% of employers have a favorable opinion of online instruction; the survey respondents also view e-learning as an equal or superior mode of instruction compared to courses taught face-to-face. However, Adams & Defleur (2006) who also conducted a series of surveys for potential employers found that graduates with online degrees are much less likely to be hired than applicants who have received their degree through coursework delivered in either a hybrid or face-to-face format. Adams & Defleur have conducted similar studies in different employment settings (e.g. health professions, academia) with similar findings (Adams & Defleur, 2005, 2006, 2007). Therefore, this is a critical issue that warrants further study, especially in light of the proliferation of online programs. Thus, regardless of the degree of similarity between the two delivery modes, it is important to note that several important institutions in the education field have an interest in determining the quality of e-learning; those institutions include the federal government (Department of Education), Accreditation Agencies (Middle States Association of Colleges and Secondary Schools), State Regulators (especially for colleges that fall under the regulation of the specific state), faculty, and students (Meyer, 2002). Colleges and universities also have a strong interest in determining how to successfully deliver online courses and obtaining applicable data on what constitutes quality in online education, as doing so will enable

them to offer coursework tailored to the needs of the students and attract and retain a better and larger student population.

The increase in online offerings has multiple implications in terms of the faculty workload and faculty experience with respect to teaching. According to Meyer (2002), some faculty members have criticized the growth model of online education as evidence of "commodification" in higher education. Those faculty members view the online expansion of educational offerings as an example of focusing on profit initiatives instead of academic quality. Meyer further argues that the debate on the quality of distance education is affected by political and emotional considerations. Critics of the e-learning model believe that use of new technologies in education means by default poor quality (due to the lack of familiarity with their use) whereas proponents argue that online education can result in a valuable learning experience. Meyer states that the discussion of quality is also influenced by the perception that online education changes both traditional power structures and institutional roles. According to this view, as a result of market demands faculty are asked by university and department administrators to focus more on the development and teaching of online courses. Meyer argues that many faculty members fear that they will not be able to fulfill the increased workload demands of online instruction and the consequent decrease of educational quality (Meyer, 2002).

Faculty concerns regarding online education can be traced back to the issue of acceptance of the use of computers in education. Postman (1995) cautioned against having a "sleepwalking attitude" towards computers in the classroom which would result in a distraction from the key educational objectives such as team based problem-solving. Postman (1995) further argues that new technologies are a powerful force of societal

change due to their intellectual, emotional, political, social and content biases. A parallel could be drawn between the concerns pointed by Postman regarding technological innovations in education and online education which is in itself a new form of technology. Online education has already had a profound effect in the way universities deliver courses.

Given the above issues, it is important to study the faculty perspective in addition to the student, administrative and employment perceptions of quality in online education. Each of those key groups are directly affected by the increased growth of online education. **Students** have a direct stake in the outcome of the online delivery of the coursework as the quality of the instructional mode will affect their personal and professional growth. **Faculty members** are affected by the university's emphasis on online education as they are required to teach and develop new and existing online courses and programs. Faculty members also have a direct effect on the quality of e-learning courses (Meyer, 2002). **University administrators** constitute the main driving force behind the growth of online programs and courses in higher education and need to ensure that faculty support this growth, meet enrollment goals and protect the reputation of the institution in the eyes of the employers by ensuring the high quality of the offered programs and courses**. Potential employers** serve a two-fold role in the growth of online education; they will have to make hiring decisions from an applicant pool that includes a progressively increased number of applicants with degrees completed online. In addition, employers can use the accessibility of online courses to their advantage for employee training and development purposes. Indeed, according to Adams & Defleur (2006),

distance and online education offerings in general have been more successful in the corporate world rather than in academia.

This study used the case of an online MBA program delivered by a traditional institution of higher learning that offers a significant amount of online programs in addition to the face-to-face opportunities.

The promotional materials for the online programs and courses available at the selected institution indicate that students will receive substantial benefits from any program in terms of quality, flexibility, development of specific career skills and affordability. Furthermore, according to the university's website all programs that are offered online have *the same exact rigorous curriculum, well renowned faculty and well respected degree as the on-campus programs*. Online education is especially valuable for those students who juggle demanding work, family and social schedules and need access to learning outside the traditional university classroom. One can expect that faculty, students and administrators will view the learning outcomes, experience and value of the online programs offered by the selected university to be similar with the ones offered through the face-to-face modes. However, no comprehensive study about the perceptions of all of the above groups (faculty, students, and administrators) regarding online education in the same setting has been conducted.

**Need for Study**

As stated previously, there are several research studies that attempt to compare the learning outcomes between online and face-to-face courses (Allen et al, 2002; Bernard et al, 2004, Coates, 2004). According to Meyer (2004), who conducted a literature review of approximately 50 comparison studies between face-to-face and online

versions of the same course, the results of the current and past research consistently show that there is no ‘significant difference’ between the two delivery modes in terms of student achievement.

While the current literature on learning outcomes in e-learning has produced consistent results, there has not been enough research focus on the perceptions of online education held from the key stakeholders. According to Almala (2006), the key stakeholders in an e-learning environment include the learners, the faculty and staff, and the educational leaders (administrators). Furthermore, potential employers also constitute a key group that has a vested interest in the best practices of online education; hiring officers will have to evaluate and potentially work with graduates who completed their education in an online environment. In addition, companies use online educational opportunities for employee training in increasing numbers (Adams & Defleur, 2006), thus resulting in several key groups interested in the perception of the online experience. The perceptions of the above key groups need to be taken into account when developing and teaching new online programs and courses as they have a direct impact in the practice of online education.

The perceptions of online education are directly affected by the epistemological beliefs regarding knowledge acquisition. Specifically, according to Rogoza (2008), personal epistemology refers to the beliefs held about the certainty, simplicity, source and justification of knowledge. The epistemological beliefs of students and faculty in higher education are likely to influence their attitudes towards online learning. .

A few recent research studies have attempted to survey the perceptions of some of the above key groups regarding online education (Adams & Defleur, 2005, 2006, 2007;

Betts, 1998; Braun, 2008, Maguire, 2005; Wallace, 2007; Wilkes; 2006). However, no recent studies have looked at the perceptions of online education of all of the above groups within the same research project and based on the online offerings of the same institution. By using the MBA online program as a case study and simultaneously examining the perceptions of three out of the four key stakeholder groups regarding the online learning, a more comprehensive and broader picture regarding the opportunities, challenges and importance of online education for the specific discipline was obtained.

**The Study**

The critical issue for this study involved the perceptions of online education held from the key constituencies identified above (students, faculty, and university administrations). Those groups were surveyed regarding their viewpoints associated with contemporary online education. Specifically, using the Wilkes et al model (2006) faculty and student participants were asked to identify the importance of specific variables such as knowledge acquisition, scheduling flexibility, interactions with students, employment potential after graduation, in making a choice for teaching or learning an online vs. a face-to-face degree program. In addition, faculty and student participants were asked to identify whether the same variables that were deemed important for the selection of a learning environment are representative of the online or the face-to-face delivery mode. A cross-comparison of the results between faculty and student participants illustrated the degree of similarity between faculty and student viewpoints with regards to online education. Follow-up interviews with the student and faculty participants attempted to look in more depth at their rationale for engaging in online coursework.

The study's results were grouped based the following categories (in accordance with the current research literature):

**Category 1: Student Perceptions and Experience**. Specifically, this component analyzed students' motivation for enrolling in an online program and whether students would choose to re-take the course/program in an online format.

**Category 2: Faculty perceptions and experience**. This component involved surveying the faculty perceptions regarding the workload, experience and level of enjoyment with respect to online education.

**Category 3: University/Program administration perceptions.** According to Maguire (2005) the perspective of university administrations on online education is underrepresented or unrepresented in studies of online education. This is an important area for further research since university administrators can not establish effective online programs without a solid understanding of the faculty and student perspective on online education (Maguire, 2005). Given the above, interviews with the program director of the MBA Online program, the director of instructional design, and the dean of the college where the program was offered attempted to provide additional insight into the perceptions and importance of online education from an administrative standpoint.

**Category 4: Employment Prospects.** The research studies by Adams & Defleur (2006, 2007) provide strong insight into the employers' perceptions on online education. Specifically, the researchers have looked at whether a job applicant with an online degree has an equal chance of gaining employment when competing with an applicant who has obtained the degree through a traditional mode of instruction (face-to-face). The researchers have obtained qualitative and quantitative findings on this question in a

variety of scenarios that include different disciplines and different degrees (undergraduate, doctorate). The research findings consistently show that job applicants who obtained their degree via online coursework have a much smaller chance of gaining employment when competing with an applicant who obtained their degree in the traditional way. Those results contradict popular arguments according to which employers perceive online education at least as favorably as face-to-face instruction.

Accordingly, the study's participants were asked to indicate the degree to which they believe having an online degree is likely to help, hurt or make no difference in the students' chances of obtaining employment upon graduation.

**Purpose of Study**

The purpose of this study was to identify the characteristics that students and faculty of the selected MBA Online program deemed important when making course environment decisions. Additionally, the students identified whether those characteristics were more representative of the online or face-to-face instructional modes. The study also obtained the viewpoints of the participants in regards to the future of online education. Furthermore, the participants' responses were examined in order to identify the possible influence of the epistemological beliefs of the participants in their overall perception of online education. Finally, the study illustrated the degree to which the views of the faculty, student and administrative participants regarding online education differed way.

**Conceptual Framework**

The conceptual foundation of this research study draws on theories from the fields of education and communication. Specifically, the research questions were based on the current applicable learning, experience and technology theories.

Online education is based on the features of computer mediated communication (CMC). According to Lengel (2004), CMC research focuses on the interpersonal communication that takes place through the internet. Specifically, CMC tools such as discussion and voice boards and other multimedia technologies allow for interactions between students and faculty in an environment that could be potentially more comfortable and closely replicates face-to-face instruction (Jordan, 2008). However, not all participants are comfortable with CMC-based interactions and proper preparation could be a key component for a valuable educational experience (Jordan, 2008).

According to the theory of technological determinism (Griffin, 2000) it is the medium rather than the content that matters most in terms of the effectiveness of carrying a message and this aspect needs to be investigated in higher education settings. Based on the above theories, this study will examine the perceptions from the key stakeholder groups in terms of whether the use of the online medium for the selected programs provides the same value as the traditional mode of instruction.

In addition, according to Meyer (2002):

*No question of the effectiveness of distance learning should ignore the impact-intended or not-the Web may have on the learning experience of the students or the students themselves.*

The proliferation of online programs has caused a cultural change in higher education and Meyer (2002) points out the different interpretations of the functions and meaning of this cultural change. Specifically, Meyer discusses Levinson's (2001) argument according to which the proliferation of the web medium has caused unintended consequences such as the diminishing role of the common gatekeepers of knowledge base (e.g. traditional libraries and books). Other researchers, have argued that the delivery mode used for

transmitting information is not neutral as it can result in specific kinds of learning behavior (Slay, 1999). On the other hand, according to Meyer, some researchers argue that technology is simply a tool for acquiring and facilitating knowledge, but does not teach anything by itself (Gardner, 2000; Graham, 2001; Morrison, 2000). These historical issues are even more pervasive today in light of the rapid expansion and increased availability and demand of online learning opportunities.

The research literature includes several studies comparing the performance of students in online and face-to-face sections of the same course (Meyer, 2008). More than 400 studies have consistently demonstrated a non-significant difference in student achievement between the same online and face-to-face courses (Meyer, 2008). However, studies of the current cultural shift in education in light of the continuous proliferation of online courses and programs need to go beyond a comparison of student performance. Therefore, by surveying the perceptions of students and faculty who are directly involved in learning and teaching online, this study attempted to explain the implications and issues associated with the expansion of online education at Business Schools. Specifically, the study evaluated the learning and teaching experience of students and faculty respectively in an online setting. In this study, this experience was assessed by surveying student and faculty perceptions of online learning. Two additional variables that were considered in this study included the administrative perspective regarding online education as well as the perception of employment prospects as a result of obtaining an online degree held by students and faculty.

The phenomenological theory by Rogers (1961) focuses on how to interpret the individual's experience through the communication process. According to Griffin (2000),

phenomenology involves “the analysis of everyday life from the standpoint of the person who is living it.” However, as Griffin argues, no two people experience life phenomena in the same way. According to Rogers (1961), it is important to allow people enough freedom to meaningfully interpret their own experiences for the specific phenomena under examination. The experience of students and faculty in an online teaching environment needs to be assessed in order to draw useful conclusions regarding the experience of online education. Therefore, this study focused on how students and faculty experience learning and instruction in the new online educational setting. Accordingly, this study obtained the faculty and student perceptions regarding their experience in online courses.

The social interaction theory looks at ways by which learning occurs through the interaction of the teaching, social, and cognitive domains. Part of the conceptualization of the study is based on the interaction framework where learning occurs when groups or people interact. According to Vygotsky (1978) and the social constructivism theory, cognitive development requires social interaction. Therefore, this study assessed whether social interaction were part of the learning experience for students participating in an online environment. According to Piaget, cognitive development is achieved by having students participating in activities that are engaging and require adaptation because knowledge acquisition requires reconstruction and reflection (Griffin, 2000). According to Driscoll (2005), in a course that is designed from the perspective of constructivism, learners are active participants and can construct their own knowledge by participating in the course. Furthermore, the ability to effectively communicate and interact with people

(Peterson, 2005), and the ability to adapt to the new technological paradigms are two of the most valued applicant qualifications according to prospective employers.

**Significance of the Study**

While the research literature includes studies regarding the perceptions of students, faculty, university administrators and employers regarding online education, none of the current studies examine the perceptions of more than two key groups in the same study. By surveying the perspectives of three out the four key stakeholders at the selected MBA Online program, this study attempted to determine where the viewpoints of those groups overlapped and where they dissented.

The study obtained multi-dimensional perspective regarding the viewpoints of online education and the associated beliefs regarding online learning. Through this multi-dimensional perspective, the study identified possible gaps in the practice of online education. Specifically, the results of this study indicated faculty needs regarding online teaching and development and pinpointed ways through which students can be more effective learners in an online environment. In terms of theory, the study drew conclusions and added to the current body of literature in regards to how learning and teaching are experienced in a computer-mediated environment and more specifically how the online learning and teaching experiences were viewed by the associated students and faculty.

**Research Questions**

The study attempted to evaluate the perceptions regarding the nature of the online course experience for faculty, students, and administrators. The study used a survey instrument and follow-up interviews to answer the following research questions for the selected MBA Online program:

1. What are the most important factors that affect the students' decision to enroll in an online program?
2. What are the most important factors that affect the faculty's decision to teach in an online program?
3. What are the student perceptions regarding the value of online education?
4. What are the faculty perceptions of the workload, teaching experience and overall impression of online education?
5. What is the administrative perspective on online education?

**Definitions**

--Online Course: A course in which more than 80% of the content is delivered online and does not include face-to-face meetings

--Face-to-Face Course: A course in which more than 80% of the content is delivered in a traditional classroom format

--Student experience:, Self-described indicators of educational experience (positive, negative, neutral), fulfillment of learning goals, overall attitude towards online courses, workload associated with completing online courses.

--Faculty workload: Amount of hours spent by faculty members in the development, preparation and teaching of the assigned course section

--Faculty experience: Self-described responses provided by faculty in terms of their teaching experience (positive, negative, neutral) in the specific delivery mode.

# CHAPTER 2: REVIEW OF THE LITERATURE

## Overview

The critical issue that was investigated in this study involved the perceptions of online education held by the key stakeholders associated with the selected MBA Online program; namely students, faculty, and administrators. Specifically, the study focused on how those different constituencies regarded online education in comparison to face-to-face delivery and their associated epistemological beliefs. According to O'Neil et al (2004), the rapid growth of online education at the post-secondary level necessitates a close examination of the implications of such expansion from the university administration, faculty, student and employer standpoint. The issue of quality in online courses and programs is at the core of all relevant research studies on the topic. Existing surveys of the key constituencies of online education (university administrators, faculty, students and employers) show a mixed reaction to the growth of online education. While students (enrolled in online programs and courses) and university administrators seem to have a favorable view of online education, faculty and employers have expressed many reservations to this phenomenon. The review of the literature was conducted in order to situate this study in the appropriate context.

This review begins with a historical overview of the traditional comparison studies between face-to-face and online education. Next, the review synthesizes studies which survey the perceptions of online higher education programs and courses held by students, faculty, university administrators and employers. Based on the current literature variables associated with the term "Value" in online education are construed among other things to encompass items such as course rigor and fulfillment of learning and teaching objectives, positive attitude towards teaching or learning online, and convenience and

flexibility of the educational experience. Those three key stakeholders groups can provide a comprehensive and multi-faceted perspective on the perceived value of online education. The review concludes by identifying gaps in the current studies and pinpoints possible directions for further research on the subject of perspectives on online education.

Traditional Comparison Studies (1990-2004)

Since the early 1990's several research studies have attempted to compare online and face to face course delivery using qualitative, quantitative, and mixed methods designs. In these studies the following criteria are commonly used in order to assess online and face to face coursework in higher education for purposes of comparison in order to determine whether the two delivery modes are equivalent.

--Criterion 1: group interaction. Studies in this category have focused on the quality, quantity of the discussions among the students and the instructor(s) in online and face-to-face courses. For example, the meta-analysis report by Tallent-Runnels et al (2006) identifies a few research studies that have explored the dynamics and possible differences between synchronous and asynchronous discussions (Ahern & El Hindi,2000: Davidson-Shivers, 2000: Tanner & Muilenburg, 2000). Furthermore, Tallent-Runnels et al (2006) also state that a significant number of research studies focus on the ways in which learners and instructors create a learning community in an online course. Specifically, researchers have focused on elements such as the role of the discussion moderator, the relevance and display of student emotions and feelings, and the role that instructors play in creating a comfortable discussion environment (Winograd, 2000: Knupfer, Gram & Larsen, 1997).

--Criterion 2: student performance. Studies on student performance focus on students' grades and acquired course skills. The meta-analysis by Tallent-Runnels et al (2006) identifies a number of research studies that compare academic performance in online and face to face courses. For example, a study by Bata-Jones and Avery (2004) compares students' mid-term and final exam grades in a pharmacology course offered in an online and face to face setting. In general, the majority of the research studies included in the Tallent-Runnels report use final course grades, test scores and grades in the course projects as the basis for evaluating the differences in student performance and acquired knowledge between online and face to face courses (Buckley, 2003: Tallent-Runnels, 2004: Neuhauser, 2002: Peterson & Bond, 2004). Specifically, Neuhauser's (2002) widely cited study, attempts to compare the impact of learning styles and preferences on student performance in online amd face-to-face courses.Neuhauser finds no evidence that a student's learning preference or style accurately predicts success in a course (online or face-to-face).

--Criterion 3: student satisfaction. Studies in this group assess students' experience and satisfaction with courses taken in online and face to face settings. Allen et al (2002), report that their meta-analysis results indicate that students view distance learning as rewarding as the face to face format. Reisetter et al (2007), conducted interviews with students in online and face to face courses in order to compare and evaluate students' attitudes and opinions regarding their experience. Kidney et al (2007), conducted a study in the University of Houston-Clear Lake during which course evaluation results were used to assess student satisfaction in online courses. Course content, interactivity and assessment techniques are some of the criteria used in Kidney's

study. The researchers found that online courses that have been developed according to the institution's quality assurance standards tend be rated higher by the students.

--Criterion 4: Faculty experience. Studies in this group assess faculty workload and overall experience with respect to teaching in online and face to face formats. For example, Tomei (2006) conducted a study comparing faculty workload including teaching and preparation in online and face to face settings. He finds that faculty teaching online spend on average 14% more time *as compared with face-to-face courses*. Conceicao's (2006) phenomenology study aims to establish whether faculty find teaching online rewarding.

In general, comprehensive reviews of the traditional comparison studies have clearly and consistently shown that there is no 'significant difference' between online and face-to-face courses in terms of student performance (Runnels-Tallent et al: 2006, Merisotis & Phipps:1999, Meyer: 2004). In the specific comparison studies, standard variables used to assess student performance include exam scores, grades on assignments and final course grades.

Runnels-Tallent et al (2006) raised several concerns regarding the research designs used in the traditional comparison studies. The authors argued that the majority of the studies reviewed lacked rigor in terms of the methodology (e.g. absence of control groups in the experimental studies). The researchers also cautioned in regards to the presence of confounding variables when interpreting the results of comparisons in different delivery formats.

Merisotis and Phipps (1999) have also been critical of the traditional comparison studies. The researchers have argued that the current comparison studies among other things:

- fail to use random sampling for the subjects of the study (students)
- do not address reliability and validity issues for the measuring instruments (e.g. course grades)
- focus on individual courses rather than entire programs
- do not account for the effects of self-selection (students enrolling in courses offered through the delivery mode that they feel most comfortable with).
- do not include a conceptual framework to guide the study

Meyer (2004), while noting the need for research on the effectiveness of online learning and the popularity of comparison studies in the literature, also echoes the methodological concerns described above. Meyer (2004) argues that the methodology problems described above are embedded in the traditional comparison study designs. Therefore, according to Meyer (2004) traditional comparison studies are likely to suffer from a poor design and a poor implementation and will not yield reliable nor useful results for evaluating online education. Meyer believes that the traditional comparison study is more useful if viewed as a reflection of the faculty's own individual experience versus a rigorous study. Meyer (2004) concludes that by re-interpreting the comparison study in this context (faculty's own experience self-study vs. experimental research), will allow researchers to gain valuable insight into the process of learning and teaching online.

Overall, the traditional comparison studies provide a useful set of criteria for assessing online offerings. However, the methodological concerns listed above limit the ability of researchers to generalize results into the larger field of online education. As a result, traditional comparison studies are more useful when used as a tool to analyze learning outcomes between the two delivery modes. In this case, researchers need to make a case for the degree to which the results of those studies can be generalized to a larger population outside a specific course, program or university.

Recent Studies on Online Education (2004-2008)

During the past two years, a new set of research studies that move beyond the scope of the traditional comparison studies of online education have started to emerge. These studies focus on gaining insight and interpreting the viewpoints towards online education of students, faculty, administrators, and of potential employers. In addition to some of the questions addressed by the traditional comparison studies (level of interaction, workload etc) additional issues that the new set of studies attempt to answer include:

- students' motivation for enrolling in online courses (Braun, 2008; Tabatabaei, 2006; Wilkes et al, 2006)
- probability of students re-enrolling in an online course (Braun, 2008)
- demographics of online faculty and students (Wilkes et al, 2006)
- administrative/institutional policies as a result of the expansion of online education (Wallace, 2007; Tham et al, 2004)
- opportunities and challenges for faculty members (Appana, 2008; Wilkes et al, 2006; Maguire, 2005; Tomei, 2006)

The new studies listed above point to a new research direction regarding the *criteria* associated with the value of online education. These studies are summarized below and described under the following categories: student perspectives, faculty perspectives, institutional and administrative perspectives, and employer perspectives. The criteria used by the researchers to assess the perspectives of the key stakeholders are also highlighted.

*Student Perspectives*

In an attempt to identify the perceptions of online learners in terms of the quality of the discussions in online courses, Stodel, Thompson and MacDonald (2006) interviewed 10 students who had indicated that they would have liked additional face-to-face interactions following their enrollment in an online course. The authors report that the specific sample of students felt that online discussions as experienced in the specific course lack spontaneity; the flow of conversations was more tightly controlled. The findings also indicate that learners seemed to have mixed feelings regarding the type of relationships that emerged as a result of the discussions with the fellow students and the professors of the course. Based on the findings, the authors caution that online learners are unlikely to benefit from a simple experience duplication of the face-to-face format in an online course and suggest among other things the use of different communication technologies and a learner-centered approach to enhance the online learning experience. Despite the small and potentially biased sample used in the study (which the authors acknowledge in the limitations section), the findings seem to echo the online learners' perspectives regarding the quality of interactions in an online course indicated by other researchers.

Song, Singleton, Hill and Koh (2004), also surveyed online students in order to identify the positive and negative aspects of the online learning experience. Specifically, the authors surveyed 76 graduate students at *a* large research University in the United States and conducted a follow-up interview with 14 participants. The researchers report that the design of the course, the comfort level with online technologies, student motivation, and time-management skills are the key components that affect whether learners indicate a higher, lower or equal level of satisfaction when asked to compare the online and face-to-face education experience. Furthermore, participants who indicated a higher or equal degree of satisfaction between online and face-to-face courses, cite technical problems as the most significant barrier to an effective online learning experience. Students who reported that they were less satisfied with their online learning experience when comparing their face-to-face courses, indicate that in addition to technical problems, difficulty in understanding the objective of the course and the lack of an effective learning community as additional hindrances to their online learning. The authors pinpoint three major implications stemming from the results of the study. First, an effective online course needs to include a design tailored to the needs of the specific online learners. Second, the authors emphasize the need for impressing upon the online learners the importance of effective time management strategies associated with taking courses online. Last, according to the authors it is important to focus on establishing a sense of community in online courses. The findings of this study seem to confirm the most common factors (sense of community, ability to interact with instructor and peers, accessibility) that affect student perceptions in online education.

In a study focusing on a more specific student population, Tabatabaei, Schrottner and Reichgelt (2006), surveyed 90 full-time and part-time MBA students in the face-to-face programs regarding the factors that would influence their willingness to enroll in online courses. Students indicated that they would be more willing to enroll in online courses in some subject areas (Management, Marketing) but less likely to do so in others (Accounting, Economics). Also, students who value peer and faculty interactions indicate a stronger reluctance to enroll in online courses. In addition, the findings indicate that students have concerns about the technology used in online courses and related doubts regarding their ability to receive technical support. Those concerns have led to a somewhat more negative attitude towards online coursework. While the study provides insight into student perceptions that may hinder online enrollment and determine the value that they attribute to online learning , the researchers also point out the need for conducting more comprehensive studies with a larger sample in order to better assess the possible target populations for online education.

A cross-comparison study by Wilkes, Simon and Brooks (2006), attempts to assess the general student and faculty attitudes towards online courses and programs. To this end, the researchers surveyed 179 students with different backgrounds regarding the status of online coursework (have take, will take, are taking, have completed, would not take, would consider taking). Participants were surveyed regarding the most important issues that would affect their selection of the delivery mode, the issues that they find to be critically important to their learning in online and face-to-face courses, and their overall attitude towards online education. The results indicate that even though students tend to have a better opinion than the faculty participants, they report that the

opportunities for live interaction and discussion are much more closely associated with face-to-face rather than online education. The findings provide an excellent framework for a cross-comparison of online and face-to-face education and associated perspectives. The Wilkes et al model (2006) is used as the methodological basis for the current study.

A recent comprehensive study by Braun (2008), attempts to assess the rationale behind student enrollment in online education as well as the likelihood that the learners would enroll again in an online course. Accordingly, Braun surveyed 90 graduate students. The participants cite flexibility and financial incentives as the top reasons for enrolling in online courses. The results also show that students found online courses to be slightly more demanding academically and that they have become more knowledgeable as a result of taking online courses. However, the majority of the participants report that they did not interact as much with the instructor and the fellow students in the online courses compared to the face-to-face delivery mode. While the overwhelming majority of the students would choose a hybrid delivery format for the next course that they would take if given the choice, an equally high number of students would recommend an online course to a colleague. Most importantly, more than 75% of the respondents indicate that they would take another online course again. According to the author, the results of the study indicate among other things that the impact of the perceived lack of interaction which is commonly cited in online courses can be reduced by quality content and the other possible advantages of the online delivery mode such as flexibility.

The studies discussed above highlight some of the variables that affect student perceptions of online education such as academic rigor of the course, quality of interactions and workload. In light of those findings, it is important to also research the

role of the faculty in terms of delivering a quality online education based on the factors identified in the research literature.

*Faculty Perspectives*

The rich literature on the issue of faculty perspectives on online education focuses on three main variables: time spent developing and teaching an online course, motivation for or against teaching online as well as the overall perceptions towards online education held from faculty members. Specifically, Maguire (2005) after reviewing 14 research studies on the subject of faculty perceptions towards online education, reports that intrinsic and extrinsic motivators such *as* flexible hours and recognition make faculty more open to teaching online. Administrative support (credit for promotion) and technological support are also listed as factors that make faculty more willing to teach online in Maguire's review. In addition, Maguire lists some of the above mentioned factors as inhibitors to online teaching for some faculty (that is some faculty state that they are intimidated by new technologies). The most frequent deterrent cited in Maguire's review is faculty workload; the time required to prepare an online course was noted as an inhibitor to online teaching for faculty in several studies. Maguire indicates that the results of her review warrant additional research on the factors that motivate or discourage faculty from teaching online (especially via qualitative methodology for additional description). Furthermore, Maguire calls for additional research for the role and perspective of the administrators of online programs and courses.

Tomei's (2006) study, compares the degree to which teaching online requires additional time from faculty members and if so, what would be the ideal class size for an online course. Tomei uses instructional content, student counseling and advising, and

assessment as variables for comparing faculty workload for online and face-to-face courses. The study finds that on average teaching online requires at least 14% more time compared to face-to-face instruction (mostly due time spent in the presentation and preparation of instructional content). Based on the three variables above and in light of the additional time required for online instruction Tomei's computation indicates the ideal traditional class size for a face-to-face class to be 17 students and for an online class 12 students. Tomei's findings are significant in the sense that we are provided with an indication of the ideal class size for online instruction.

Conceicao's (2006) phenomenological research study goes beyond the assessment of time spent in preparation time for online course development and instruction and examines the overall experience of faculty members who teach online courses. Study participants include 10 faculty members who have taught online courses through different platforms, from a number of colleges across the United States, across different disciplines. The results of the study also indicate that faculty members believe that teaching online courses involves a much heavier workload, but at the same time results in an overall satisfying experience. Specifically, the faculty participants in Conceicao's study report that an online course requires additional time compared to a face-to-face course due to the need to among other things to organize the course content and provide the content in advance of the course start date. Faculty members also stated that online teaching required "a more intense cognitive effort" in order to effectively manage the course related tasks such as discussions and grading. Furthermore, faculty reported an increased level of interaction with online learners via e-mail based inquires; one faculty reported that some online learners communicated outside class up to three times a day.

Faculty participants also reported positive attitudes associated with online instruction; terms such as “stimulation”, “excitement”, “rewarding” and empowering” were used to explain the faculty’s online teaching experience.

Despite the small yet diverse sample included in Conceicao’s study, the findings clearly indicate that even though teaching online requires a higher level of commitment in terms of time and energy from faculty, the experience can be gratifying in many ways---- an area where additional research is needed.

In another comparison study Wilkes, Simon and Brooks (2006), found that the faculty perceptions of online programs are less favorable than those of college students. The dimensions of faculty perceptions explored included the desire towards teaching an online course and the characteristics deemed to be representative of online vs. face-to-face instruction, as well as the overall attitude towards online courses. The implications of the less favorable faculty perceptions towards online education were considered to impact the delivery of online courses. The authors emphasize the role of universities in focusing on the quality of online courses by communicating with faculty regarding their concerns. Of particular interest are the qualitative findings on the faculty perspectives which for the most part show a guarded attitude towards online education. One faculty member reports that “The advantages for a few students is more than offset by the losses incurred from the lack of institutional controls and lack of interaction…” Another faculty member is critical of the learning benefits attained via online courses: “Tell them the truth. This is a good way to develop skills in rote memory-the lowest form of learning.”

In summary, the above studies indicate that faculty members have mixed views regarding the value of online education. Furthermore while some faculty enjoy teaching

online, some members have expressed concern regarding the workload and the degree of support available to them in developing and delivering those courses. Therefore, it is important to study what drives faculty perceptions regarding the above issues and to research the university administration's perspective regarding online teaching.

*Institutional and Administrative Perspectives*

Research studies focusing exclusively on the perspectives of university administrators on online education provider are very limited (especially when compared with the studies that are available on faculty and student perspectives). A few research studies cite university polices and support systems as they relate to motivating or discouraging faculty from teaching online (Betts, 1998 & Maguire, 2005). However, almost no studies examine the perspective of university administrators regarding the current issues associated with the expansion of online education (faculty support, cost issues, quality of offerings etc).

A recent case study by Wallace (2007), makes a call for the need of university policy updating in order to address possible issues associated with online programs. Specifically, the author argues that policies on faculty workload and responsibilities, course evaluations, student assessment, record keeping, copyright and intellectual property, will need to be updated in order to reflect the institution's increased online offerings. While the author acknowledges that some of the proposed changes will take time to develop, there is almost no mention on the university administration's perspective on those issues. Therefore, perspectives on online education held by key university administrators (Deans, department heads etc) should be thoroughly investigated in future studies in order to provide a cross-comparison between the views held by students,

faculty and university administrators regarding online education. By researching the administrative perspectives, the study will be able to offer a comprehensive view on the factors that affect the delivery, development and overall quality of online education programs.

*Employer Perspectives*

The literature on employer perspectives regarding online education is relatively new. Adams and Defleur have published a number of studies comparing the applicants potential of getting hired based on whether their degree was obtained online or face-to-face or via a hybrid method. In almost all of the cases, the candidate with a traditional degree is given a higher probability of being hired (Adams & Defleur, 2005, 2006, 2007)

In one of their studies Adams et al (2006) evaluate the perceptions of hiring managers regarding the acceptability of online degrees as an employment credential. The authors conducted a survey of potential employers and obtained both quantitative and qualitative data. The research data in the study clearly indicate that employers are much more reluctant to hire candidates with online degrees compared to candidates who obtained their degrees through face-to-face instruction. This study does not concur with a commonly cited view held by advocates of distance learning according to which employers perceive online education to be as good if not superior to the traditional method of instruction. While Adams et al (2006), have clearly defined the operational aspects of the study, caution should be exercised when generalizing the results as the sample used does not focus on a specific industry. Nevertheless, the qualitative comments obtained by the hiring managers provide very useful insight into why the prospective employers perceive degrees obtained online as inferior. A more focused study which

surveyed employers in a specific field also by Adams et al (2007), specifically assessed the hiring chances of a candidate with an online degree in health care professions. The results once again show that the applicant with a face-to-face degree has a better chance of being hired.

In an earlier study the authors evaluate the chances of a faculty candidate who obtained their doctoral degree online (Adams & Defleur, 2005). The results indicate that the candidate with the doctorate obtained via the traditional mode of instruction has a higher chance of being hired. The authors caution doctoral students to think carefully before committing to an online program for their doctorate. In a follow-up study Adams (2008), looked at the factors that possibly make Deans and other hiring officers reluctant towards hiring a faculty member with an online doctorate. Respondents cited the importance of the face-to-face interaction, the reputation of the institution and the mentored learning experiences as areas where the applicant who obtained the doctorate via an online program is lacking when compared to the candidate with a degree that was obtained face-to-face. The findings of the Adams & Defleur studies provide grounds for further investigation in terms of what would make an online degree more attractive to employers.

**Summary and Need for Research**

The existing literature provides insights into the perceptions held by key stakeholders regarding online education. As presented in previous sections, there is a substantial degree of research on the views and experiences of online faculty and students and to some degree the views of potential employers. There is very limited research into

the perspectives of university administrators, one of the key groups in the effective delivery of online education.

There is currently no study which provides the perspectives regarding the value of online education from more than two of the key stakeholders. Therefore, this study investigated the perceptions of three of the four key stakeholders, namely students, faculty and university administrators. The goal of the study was to obtain a comprehensive understanding of online education perspectives from those who participate in all aspects of online education;  planning and structuring of online learning as well as delivery of online courses with the ultimate goal of effectively planning course development, instruction, marketing and strategic management the online curriculum. Finally, the study addressed the concerns of the key constituencies and looked at how university and program administrators can respond so that the quality of online education exhibits traits of excellence which in the end results in high credibility.

# CHAPTER 3: METHODOLOGY

## Overview

This study aimed to describe the attitudes and experiences of the selected students and faculty in regards to online education. The findings of the study provided insight into the processes associated with online teaching and learning. Furthermore, the results of the study aim to help the faculty and administrators who are involved in online course delivery and development to enhance the online experience for the key constituencies (students, faculty and employers) for the specific academic discipline (Masters in Business Administration). This chapter explains the rationale for the selection of the research paradigm, and outlines the data collection and sampling procedures. In addition, the procedures for interpreting the collected data and strategies for assessing the reliability of the study (including the pilot study plans) are also described.

## Research Paradigm

In accordance with this study's goal of investigating the attitudes and experiences of online students and faculty of the selected program, a combination of quantitative and qualitative data elements were obtained. Therefore, the study employed a mixed methods design. The use of mixed methods designs dates back to the 1950's; recently, mixed method designs have become very popular in the social sciences (Bergman, 2008). According to Creswell (2003), mixed methods involve the collection, analysis and mix of qualitative and quantitative methods in a study based on the premise that the combination of the qualitative and quantitative paradigms will allow for a better understanding of the research problem under investigation. Therefore, the methodological approach of this study drew on the strengths of both the quantitative and qualitative designs in order to

obtain data that provided a more complete picture regarding the attitudes and experiences of online students and faculty.

According to the quantitative world view, the researcher employs surveys and experiments to collect numeric data (Creswell, 2003). In addition to the numeric measurement of the data obtained, quantitative survey designs allow researchers to identify and analyze the presence of variables in the research questions of the study (Creswell, 2003). Furthermore, through the use of statistical analysis and by employing the standards of validity and reliability associated with the quantitative paradigm, the researchers are able to test or verify theories and hypotheses (Creswell, 2003). In short, a quantitative design allows researchers to obtain clearly measurable data answering the "what" and "how" type questions. Therefore, this study used the quantitative paradigm in order to survey the students and faculty of the selected MBA online program regarding their perceptions of online learning.

Under the qualitative paradigm, research can take place at the actual site of the study, and the data collection processes are primarily interactive in nature (e.g. interviews, site observations participant observations) (Creswell, 2003). Furthermore, the qualitative world view involves a holistic assessment of the phenomena under examination and a high level of involvement on behalf of the researcher for the purpose of interpreting the results (Creswell, 2003). In other words, qualitative designs allow researchers to observe the phenomenon under examination first-hand. Qualitative research provides answers to the "why" type questions. Accordingly, by conducting one-on-one interviews with a sample of students from the MBA Online program, the study

collected qualitative data for additional insight regarding the student attitudes investigating the "why" towards online education.

According to Creswell (2007), mixed methods designs provide added value than stand-alone qualitative and quantitative methodologies because they:

---Offset the inherent weaknesses associated with qualitative (e.g. personal interpretations of data by the researcher) and quantitative (lack of participants' voice in the data) designs.

---Allow researchers to use a wider number of data collection tools.

---Allow researchers to corroborate findings (triangulation) obtained from either the quantitative or qualitative data collection processes.

Based on the preceding discussion, this study employed a survey instrument in order to collect primarily quantitative data regarding the perceptions of online education from students and faculty associated with the selected MBA Online program. Furthermore, the study included follow-up one-to-one interviews with the students who agree to participate. In short, a sequential explanatory strategy was used to obtain the data for this study. This mixed methods strategy involves "…the collection and analysis of quantitative data followed by the collection and analysis of qualitative data" (Creswell, 2003, p. 215). The sequential explanatory strategy is primarily used in order to allow the researcher to explain and interpret results of a primarily quantitative study through the use of additional qualitative data (Creswell, 2007). Accordingly, the sequential explanatory strategy allowed for a more thorough and confident interpretation of the primary quantitative data that was initially obtained as part of this study.

## Site Selection and Sampling Plan

### Site

In accordance with several studies in the field of online education, this study was conducted in a Business School of a 4-year, private, not-for-profit, high research activity university in the United States. The specific university has been offering online degree program options since 1996. Currently, the selected institution offers Bachelors and Master degrees as well as a significant number of certificate programs online.

Participants (students and faculty) were drawn from the online MBA program which was offered through the Business School of the selected University. Students enrolled in the MBA program take the required courses in a pre-defined sequence as a cohort and complete the degree in approximately 24 months after initial registration. There are currently four cohorts of approximately 25 students enrolled in the program. All course work was completed online via asynchronous delivery via the Blackboard Vista platform with the exception of three on-site seminars that take place face-to-face on the campus site. Currently enrolled students in the online MBA program are provided with 24 hours/7 days a week technical support, advisors' assistance for scheduling and academic progress goals as well as access to the University's and School's community events via live webcasts. The admission requirements are the same for both the face-to-face and online MBA programs. The faculty of the MBA online program is drawn from the same part-time and full-time pool as the face-to-face program delivered on campus.

### Sample

For the first stage of the study, which included the administration of a survey, a purposeful comprehensive sample was used. This sample included all four current cohorts of students who have completed at least one quarter in the MBA Online program.

The purpose of this sampling strategy was to balance the need for an inclusive study of the population under examination while at the same time ensuring that participants had enough exposure to this specific online program in order to be able to reflect on their online learning experience. The study also included a purposeful comprehensive sample of the faculty members who have taught at least one online course over the past academic year in the four specific cohorts of the program. According to Wiersma and Jurs (2005), comprehensive sampling involves the inclusion of all units with specified characteristics in a study. Accordingly, in order to be included in the study participants must have at least one quarter of experience learning, teaching or managing the specific program.

For the second stage of the study which included one-to-one interviews, the sample comprised of the student and faculty participants who indicated their willingness to be interviewed during the completion of the survey. Since the purpose of the follow-up interviews in the second stage of the study was to corroborate and gain more information about the quantitative findings from the survey instrument, a small fraction of the respondents from the first stage was deemed sufficient.

Finally, after the preliminary processing of the survey and interview results follow-up interviews with the director of the MBA Online program, the director of the instructional design of the college and the dean of the college were conducted in order to discuss the findings of the study and gain insight into the administrative perspective regarding online education.

**Data Collection Procedures**

Based on the mixed methods paradigm, this study included two main data collection instruments to be used in two different stages. For the first part of this study, a

survey instrument was used with the purpose of collecting comprehensive quantitative data from students and faculty associated with the online MBA program. At the conclusion of the survey, participants (faculty and students) were asked whether they were willing to participate into a one-to-one follow up interview regarding their perceptions of teaching and learning in an online environment. As indicated above, the study also included an interview with the director of the program, the director of instructional design and the dean in order to obtain additional data regarding the administrative viewpoint of online education. The combination of a quantitative data collection instrument (survey) and a qualitative follow-up approach (interview) had multiple advantages for the specific study. First a comparison of the survey and interview results allowed for a triangulation of the study's findings. Second, using more than one data collection instrument increased the validity of the study's results. Finally, the quantitative and qualitative results obtained from the survey and interview instruments respectively resulted in gaining a more comprehensive view regarding the student, faculty and administrative perspectives associated with online education as per the goals of the study.

The survey questions and the interview protocols were based on the model from Wilkes et al (2006). The model was adopted to fit the specific focus and population of the current study. The researcher obtained permission from the author of the instrument in order for it to be used in the proposed study (see Appendix A).

## Data Collection Methods

Description of the Survey

Two sets of a web-based survey were used in this study, one for the student population in the online MBA program and one for the faculty members who teach in the program. Both sets of surveys were based on the Wilkes et al (2006) model that has been extensively cited (Albalawi et al, 2008; Alexander at al, 2009; Wang, 2007). The first part of the survey included basic background information for classification purposes such as gender and grade point average for the student version and faculty rank and level of classes taught for the faculty version. The second part of the survey asked student and faculty participants respectively to indicate their plans in terms of taking or teaching online courses in the future. The third part of the survey which was identical for both the student and faculty participants includes Likert-scale questions regarding the characteristics of online and face-to-face courses and the factors affecting the enrollment of students in online vs. face-to-face programs. Finally, participants were asked to indicate their overall attitude towards online education. Appendix B includes the proposed student questionnaire and Appendix C the proposed faculty questionnaire.

This survey instrument allowed for a cross-comparison of the student and faculty attitudes and beliefs towards online education. The survey was administered online using the *Snap* survey software which was supported by the researcher's institution. Participants were invited to take the survey via an e-mail forwarded by the director of the MBA online program. The invitation to take the survey included a brief description of the study's rationale and the web link through which participants were able to take the survey. Both student and faculty versions of the survey were anonymous and the responses cannot be linked to any of the participants. At the end of the survey,

participants were asked whether they were interested in participating into a one-to-one interview and if this was the case to provide basic contact information such as phone and e-mail. To encourage participation in the survey ten gift cards to Starbucks worth $10 each were awarded to participants after a random drawing.

According to Babbie (2004) survey instruments are extremely useful for describing characteristics of large groups and with proper sampling method allow researchers to make descriptive claims for the entire population under examination. In addition, Babbie (2004) argues that surveys afford the researcher flexibility in allowing a large number of questions for any given topic. Finally, Babbie (2004) argues that surveys can ensure the uniformity of the questions in the sense that every participant is asked to respond to the same number and type of questions.

Interviews

According to Creswell (2003), interviews are a particularly useful data collection tool when participants cannot be observed directly in action. Student and faculty participants of this study were likely to have a limited presence on the main campus location due to the fact that the specific MBA program is offered online. Therefore, personal observations---the type of qualitative research that does allow the researcher to gain first-hand experience on the phenomenon under investigation (Creswell, 2003)---were not be feasible for this study. Furthermore, according to Marshall and Rossman (2006) interviews can provide the researcher with a significant amount of data in a relatively short period of time (compared to other qualitative data collection methods). For the purposes of this study conducting follow-up interviews with the survey respondents was deemed to be the most efficient data collection method since it allowed

for verification and a more in-depth look at the students' and faculty perspectives on online education as represented through the survey results.

Consequently, upon the preliminary data analysis of the survey results, one on one interviews were conducted with the student and faculty participants who had indicated their willingness to participate in this second stage of the study. For participants who were physically present at least one day per week on the main campus where the MBA online program is offered interviews were conducted face-to-face. The study also included off-campus and telephone interviews for the participants that were not available on-campus. The purpose of the follow-up interviews with the student and faculty participants was to afford the participants the opportunity to reflect and expand upon the perspectives on online education that emerged from the survey results in the first part of this study.

The interview questions for both the faculty and the student participants were also based on the Wilkes et al model (2006). The interview process will begun with an explanation of the study's goals and with a statement assuring the participants of the confidentiality of their responses when the study results are presented. The interview protocol for this study primarily included the open ended questions from the Wilkes et al (2006) survey model adapted to the two specific sample populations of the current study. One additional question regarding the primary motivation for choosing the online version of the MBA program was also included. Furthermore, probing questions were used when appropriate in order to ensure that participants answered the interview questions in sufficient detail which would in turn provide an in-depth look at the student and faculty

perspectives regarding online education. Appendix D includes the interview protocol for this study.

To ensure that no data was lost during the interview process a tape recorder was used to record the participants' responses (after obtaining the participant's consent). The proposed interview protocol also included the use of notes from the interviewer during the entire interview process in order to ensure that the data set included the researcher's reflective inquiry associated with the participants' responses (e.g. thoughts and reactions, unexpected response or comment to a potential question etc). The responses provided by the participants during the interview process are also reported anonymously and no personal identifiable data was included in the results section of the study. To increase the chances of participation during the interview stage, each interview participant received a $5 gift card to Starbucks upon completion of the interview.

Summary

The data collection procedures of this study were based on the strengths of the quantitative and qualitative research paradigms. This study used a published survey instrument in order to collect quantitative data regarding the faculty and student perspectives on online education. Furthermore, follow-up interviews with a selected percentage of the survey's respondents had a two-fold purpose; first, to verify the responses provided in the survey and second to gain additional perspectives on the respondents' perception of online education (using the survey's preliminary results as a starting point). By using a mixed methods approach, the study obtained data that can be more easily triangulated and/or generalized. Mixed methods designs can be viewed as simply a trend that researchers are compelled to follow (Bergman, 2008). However, the

nature of the research problem and the unique population of the proposed study warrant a two-stage data collection strategy which would allow for the initial collection of easily quantifiable information. Accordingly, the data obtained during the first stage of the study was analyzed and reflected upon further through the addition of qualitative data. Therefore, the proposed study benefited from a mixed-methods research design.

**Data Analysis Procedures**

Quantitative Data

The quantitative data of this study were analyzed through descriptive statistics. Specifically, the reporting of the study's results included raw percentages for the questions related to the likelihood of taking or teaching in an online program in the future and the primary motivators for engaging in online coursework or instructions. Furthermore, a mean and a standard deviation were computed for the remainder of the survey questions. The mean and standard deviation scores provided a summarized view of the perceptions held by the student and faculty participants regarding online education as reflected by the study's variables. The raw percentages, the standard deviation and the mean scores were cross-compared among the faculty and student groups. Such comparison provided insight into whether the faculty and student viewpoints within the specific group differ significantly in terms of the characteristics and attitudes towards online education as per the original 2006 model of Wilkes et al. To assist with the computation of the descriptive statistics referenced above the study will use the SPSS statistical software version 18.

Qualitative Data

The purpose of qualitative data analysis is to bring meaning into a set of raw data and transform the data set into concrete findings (Marshall and Rossman, 2006; Patton, 2002). However, according to Patton (2002), no specific formula exists for the process described above; only general guidance as to how one can draw specific findings from a raw qualitative data set. Accordingly, the interviews that were conducted as part of this study were processed based on Creswell's (2006) qualitative analysis model which includes the following six steps:

1. Organization of the collected data
2. Reading of the collected data
3. Coding of the collected data
4. Describing the collected data
5. Representing the collected data
6. Interpreting the collected data.

Creswell's six step qualitative analysis model were used in this study as follows:

1. Organization and Preparation: During this stage, the interview data were transcribed and each interview session was numbered based on the order that it was conducted.
2. Reading: The interview transcripts were thoroughly examined in order to establish a general sense regarding the attitudes of the study's participants towards online learning. In accordance with Creswell's model, this stage of data analysis also involved reflection on the overall meaning of the participants' responses in connection with the research questions of the study.

3. Coding: Through a systematic analysis of the interview data (Creswell, 2003), a list of the major topics covered during the interviews was created. As per Creswell's model (2003) similar topics were clustered together and an abbreviated form with the most descriptive wording of the main topic categories was used in order to create the coding system.
4. Description: A smaller number of themes that emerge from the coding process emerged in this stage. These themes formed the basis of the main findings of the current study (e.g. overall attitude towards online education).
5. Representation: During this stage a detailed illustration of all the themes that emerged through the interviews associated with the study was provided. The purpose of this data analysis phase was to give the reader a summary of the findings (Creswell, 2003). In this study, the interview findings were presented in the form of a narrative inquiry.
6. Interpretation: The final section of the qualitative data analysis process of the study described and interpreted the meaning of the interview responses. This interpretation includes the specific implications that emerged from the analysis of the results in connection with the study's research questions.

**Pilot Study Plans**

Prior to the administration of the survey instrument and the follow-up interviews to the selected sample, a pilot study was conducted. The pilot study included seven students and three faculty participants associated with the MBA Online program. The participants of the pilot study were selected by the program director of the MBA Online

program. Upon the preliminary processing of the pilot survey results, student and faculty who indicated their willingness to participate were invited to a follow-up interview.

The purpose of the pilot study was to test and refine the survey instrument and the interview protocol and determine items that may suffer from lack of clarity or any other problems in understanding.

**Conclusion**

The research design of this study included the initial administration of a quantitative based survey instrument and follow-up interviews with the survey participants. This mixed-methods design allowed data to be collected in a manner consistent with the strengths of the qualitative and quantitative paradigms. Data analysis procedures were also based on the standards of qualitative and quantitative methodologies and included the use of descriptive statistics and thematic analysis. This design allowed for the collection, analysis and triangulation of collected data and therefore threats to validity and reliability were reduced.

# CHAPTER 4: RESULTS

## Overview

The purpose of this study was to obtain a multi-faceted perspective on the perceptions of online education held by the key stakeholders (students, faculty, and administration). Specifically, the study focused on a comparison of the viewpoints regarding online education held by students, faculty, and administrators. This chapter presents a summary of the results from the data collected. The data-collection instruments of this project included the administration of a survey and follow-up interviews with the student and faculty groups. In addition, interviews with the key administrative personnel of the college where the study was conducted were held in order to gain a better understanding of the administrative viewpoint on online education.

### Chapter Summary

First, the results of the pilot study are presented. Next, the quantitative data obtained from the survey for the student and faculty groups are discussed. The themes identified during the interview process are examined next, along with their importance to this research project. Finally, an overall review of the results as they pertain to the research questions of this study is provided.

## Pilot Study

### Overview

Prior to the commencement of the main study, a pilot study was conducted in order to ensure the clarity and effectiveness of the proposed data collection instruments (survey and interview). Specifically, the main purpose of this pilot study was to test the feasibility of the data collection instruments that were going to be used during the main study. The participants of the pilot study were chosen by the program director of the MBA online program and included five students and three faculty members.

Methodology

During the pilot study, participating faculty and students were surveyed regarding their beliefs on contemporary online education as per the goal of the main study. Using the Wilkes et al. model (2006), faculty and student participants were asked to identify the importance of specific variables, such as scheduling flexibility and employment potential after graduation in the choice of the course delivery mode (online vs. a face-to-face). In addition, faculty and student participants were surveyed regarding their overall perception of the effectiveness of online education as a course delivery mode. Finally, participants were asked to make predictions about the future of online education. The pilot survey was conducted in October and November 2009. The survey was administered online using the Snap software.

Two participants (one faculty, one student) indicated their willingness to participate in a follow-up interview during the administration of the survey. The interview protocol included the open-ended questions from the Wilkes et al. (2006) survey model adapted to the two specific sample populations of the main study. One additional question regarding the primary motivation for choosing the online version of the MBA program (for studying and teaching) was included. Furthermore, probes were also used when appropriate in order to ensure that participants answered the interview questions in sufficient detail. Follow-up interviews were conducted in November 2009. A few reminder e-mails were sent to the participants in order to ensure the maximum rate of participation.

Pilot Results

All three faculty members participated in the survey, along with five of the seven students. One faculty member and one student participant participated in the follow-up

interview. The results of the study clearly indicate that both faculty and students believe that online education will likely continue to grow in the future. The convenience and flexibility factors associated with online learning were two recurring themes that participants cited as the main motivation for students to enroll in online programs. The participants' responses during the pilot did not provide a clear indication in terms of the ways that online learning may develop in the future. One underlying issue that warranted further exploration during the main study was the expected growth potential associated with online education.

Student participants in the pilot study held a positive perception of their online education experience, with four out of five students stating that they will definitely be taking an online course in the future. Specifically, the average on the question pertaining to the likelihood of taking an online course in the future was a 3.6 on a 4-point scale, where 4 indicates a definite decision to take an online course, with a standard deviation of 0.89. In addition, the student group also believed that they would have an equal chance of securing employment after graduation if they were to complete their program online or face to face. The overall attitude of the student group toward online education was also very positive; four out of five students indicated that they are favorably or very favorably oriented toward online education.

With reference to faculty participants, while acknowledging that online education offerings are likely to continue to grow in the future expressed a few reservations. For example, one faculty member concurred that online education is more flexible, but also indicated that students learn more in a face-to-face environment. None of the faculty members stated that they would definitely teach a course online if given a choice in the

future; one faculty member clearly expressed a preference for teaching face-to-face. The average for the question pertaining to the likelihood of teaching a course online in the future was a 2.5 where 1 indicates an unwillingness to teach a course online. At the same time, faculty participants seemed to acknowledge the value of online education as most of them reported that students have an equal chance of securing employment after graduation regardless of whether they obtained their degree online or face-to-face. The overall attitude toward online education held from faculty participants in the pilot study appeared neutral (3.33 on a 5-point scale, where 5 indicates a very unfavorable attitude).

The reliability of the survey instrument was computed during the pilot study using the Cronbach alpha coefficient for internal consistency. The Cronbach alpha coefficient was found to be .69.

Discussion

The purpose of the pilot study was to determine the feasibility of the instruments used (survey and interview). The administration of those instruments has indicated that the wording of a few items in the interview protocol had to be revised for clarity and effectiveness. Specifically, question 1 of the student and faculty interview protocols was revised as follows:

*What do you believe is the most important factor that motivates **students** to take on-line courses?*

Question 2 of the student and faculty interview protocols was revised as follows:

*What do you believe is the most important factor in **discouraging students from taking** on-line courses?*

Question 3 of the student interview protocol *(What was the most important factor that made you stay in the online MBA program?)* was not used in the main study due to evidence of lack of understanding from the participants during the pilot stage.

A few themes emerged from the pilot study that helped guide the data collection process during the main study. Faculty and student participants agreed that online education offerings will likely continue to grow in the future, and the trends show that online education is here to stay as a mode of delivery. Second, both faculty and student participants indicated that a graduate has an equal chance of employment regardless of the delivery mode in which the degree was obtained, as there are other factors that would determine employment irrespective of the mode of course delivery. In addition, faculty and student attitudes toward online education seemed to differ. Even though both of those groups acknowledged the flexibility and convenience factors as the main benefits to online learning, students held a very favorable view toward online learning, whereas faculty appeared much more neutral.

One possible explanation for the discrepancy in the faculty and student attitudes, explored further in the main study, relates to the convenience and flexibility factors associated with online learning. These factors seem to be more closely related to the student experience than to the faculty experience. As a result, students tend to view online education more favorably as it affords them the benefits that they are seeking while pursuing their education. On the other hand, faculty members have argued that the increasing workload demands associated with online teaching constitute a significant challenge in terms of workload. One faculty member in the pilot stage argued that it takes five times more time to develop and teach an online course than a face-to-face course. Accordingly, the responses provided from students, faculty, and administrators during the main study were carefully reviewed for variables that may explain the discrepancy regarding the attitudes toward online education.

Conclusion

The main purpose of this pilot study was to test the survey and interview questions for clarity. None of the participants reported any issues with either the administration of the survey or the questions asked. A few clarity issues with three of the interview questions emerged, and the protocols were revised accordingly. Therefore, after the revisions stated above, the same survey and interview protocols were incorporated into the main study.

**Results of Main Study**

The main study was conducted during the 2010 winter quarter (January-April) and involved the administration of a web-based survey to students and faculty participants. In addition, follow-up interviews were conducted with students and faculty in order to triangulate the survey results. Finally, interviews with key administrators of the MBA online program were held in an attempt to understand their perception regarding online education. Based on the data collected, a cross-comparison of the views held by students, faculty, and administrators is presented in the following chapter.

**Survey Results**

Student Participants

The student survey questionnaire was administered electronically using the Snap Survey software. One hundred and three student participants, representing all cohorts of the MBA online program who completed at least one quarter in the program, were invited to participate. The survey was available during the 2010 winter quarter (January-March). Reminder messages were sent during the survey availability period in order to maximize the response rate. Overall, 63 students participated in the survey, a response rate of 61.17%. In addition, the Cronbach alpha co-efficient was calculated after the administration of the student survey and was found to be .77.

I. Demographics

As illustrated by the tables below, the student population in this study comprised 37 males and 26 females (Table 1). The mean distance to the closest college or university was 12.21 miles (Table 2). Seventeen students (27%) were completing the program from an international location at the time of the survey (Table 3). 88% of the participants had completed six or more online courses (Table 4).

**Table 1: Gender**

| Gender | Frequency | Percent |
|---|---|---|
| Male | 37 | 58.7 |
| Female | 26 | 41.3 |
| Total | 63 | 100.0 |

**Table 2: Distance from home to nearest college/university**

| | Minimum | Maximum | Mean |
|---|---|---|---|
| Miles | 1 | 50 | 12.21 |

**Table 3: Location**

| Location | Frequency | Percent |
|---|---|---|
| Domestic | 46 | 73.02 |
| International | 17 | 26.98 |
| Total | 63 | 100 |

**Table 4: Online courses completed**

| Courses | Frequency | Percent |
|---|---|---|
| 0-1 | 1 | 1.6 |
| 2-3 | 3 | 4.8 |
| 4-5 | 3 | 4.8 |
| 6 or more | 56 | 88.9 |
| Total | 63 | 100.0 |

II. Student Attitudes and Opinion Toward Online Education

As indicated by Table 5 below, all of the student participants would, at the very least, consider taking an online course again. In addition, more than 80% of the students would like or definitely plan to enroll in an online course in the future.

**Table 5:Choice based on current experience with online coursework**

| | Frequency | Percent |
|---|---|---|
| Not going to take a course online | 0 | 0 |
| Consider taking a course online | 11 | 17.5 |
| Like to take a course online | 15 | 23.8 |
| Definitely take a course online | 37 | 58.7 |
| Total | 63 | 100.0 |

Students were also asked to indicate the importance they attribute to 28 variables on a scale of 1-5 (with 1 being not at all important, and 5 extremely important) when making course environment decisions (online vs. face-to-face). According to the students, the five most important variables that would affect their decision to enroll in an online or face-to-face course are:

1. Accreditation of the institution offering the courses.

2. Schedule flexibility to accommodate work responsibilities.
3. Knowledge gained.
4. Organized and systematic presentation of course materials.
5. Timely feedback to questions.

The complete ranking of the 28 variables with the mean and standard deviation is illustrated in Table 6.

In the second part of the survey, students were asked to indicate whether the same 28 variables rated in the previous question were more likely to be characteristic of an online or a face-to-face course. As indicated in Table 7, only two of the five factors deemed critical from the students when making course environment decisions (schedule flexibility to accommodate work responsibilities and the organized and systematic presentation of course materials) are most likely to be found in an online setting. Table 7 summarizes the results from the student group indicating which of those variables are more likely to be characteristic of an online or face-to-face course (with indicating the likely presence in an online course, and 5 the likely presence in a face-to-face course).

In an attempt to depict visually the likelihood of which of the variables that students deemed important when making course environment decisions are likely to be a characteristic of an online or face-to-face course an overlay scatterplot was created.

**Table 6: Importance rating of factors determining course environment (students)**

| Variable | N | Mean | Std. Deviation |
|---|---|---|---|
| Accreditation | 61 | 4.87 | .386 |
| Flexibility to accommodate work | 63 | 4.81 | .470 |
| Knowledge gained | 63 | 4.67 | .475 |
| Organized and systematic presentation of course materials | 63 | 4.65 | .722 |
| Timely feedback | 63 | 4.60 | .636 |
| Skills acquired | 63 | 4.52 | .692 |
| Electronic submission of assignments | 63 | 4.52 | .913 |
| Access to information | 63 | 4.37 | .867 |
| Highly structured presentation of materials | 63 | 4.29 | 1.023 |
| Intellectual challenge | 63 | 4.27 | .787 |
| Ability to secure employment after graduation | 63 | 4.16 | 1.234 |
| Objective tests | 63 | 4.13 | .992 |
| Approval from State Dpt. of Education (institution) | 62 | 4.06 | 1.240 |
| Opportunity for interactions/discussion (faculty-students) | 63 | 3.98 | .871 |
| Costs of tuition and fees | 63 | 3.95 | 1.128 |
| Time required to complete coursework | 62 | 3.95 | .982 |
| Flexibility to accommodate social activities | 63 | 3.90 | 1.254 |
| Privacy of communication (students-faculty) | 63 | 3.83 | 1.129 |
| Opportunity for interaction/discussion (students) | 63 | 3.78 | .941 |
| Privacy of communication (students) | 63 | 3.73 | 1.153 |
| Travel costs | 63 | 3.48 | 1.330 |
| Commuting time | 62 | 3.47 | 1.376 |
| Communication outside class time (faculty-students) | 63 | 3.43 | 1.214 |
| Communication outside class time (students) | 63 | 3.32 | 1.162 |
| Tests with discussion questions | 63 | 3.03 | 1.107 |
| Opportunity for live interactions (students) | 62 | 2.98 | 1.180 |
| Opportunity for live interactions (faculty-students) | 62 | 2.95 | 1.207 |
| On-campus exams | 61 | 1.75 | 1.135 |
| Valid N (listwise) | 55 | | |

**Table 7: Characteristics of an online vs. face-to-face course (students)**

| | N | Mean | Std. Deviation |
|---|---|---|---|
| Commuting time | 63 | 4.56 | 1.028 |
| On-campus exams | 63 | 4.52 | 1.060 |
| Opportunity for live interactions (faculty-students) | 62 | 4.34 | .886 |
| Opportunity for live interactions (students) | 62 | 4.31 | .916 |
| Travel costs | 62 | 3.90 | 1.051 |
| Communication outside class time (faculty-students) | 63 | 3.43 | .734 |
| Accreditation | 63 | 3.33 | .648 |
| Costs of tuition and fees | 63 | 3.33 | .783 |
| Communication outside class time (students) | 63 | 3.33 | 1.295 |
| Timely feedback | 63 | 3.30 | 1.042 |
| Approval from State Dpt. of Education (institution) | 63 | 3.25 | .647 |
| Skills acquired | 61 | 3.25 | .650 |
| Ability to secure employment after graduation | 62 | 3.23 | .663 |
| Access to information | 63 | 3.21 | .953 |
| Opportunity for interactions/discussion (faculty-students) | 63 | 3.19 | 1.060 |
| Opportunity for interactions/discussion (students) | 63 | 3.16 | 1.153 |
| Knowledge gained | 63 | 3.11 | .599 |
| Tests with discussion questions | 63 | 3.10 | .734 |
| Intellectual challenge | 63 | 3.02 | .751 |
| Objective tests | 63 | 2.98 | .609 |
| Privacy of communication (students) | 63 | 2.94 | .759 |
| Highly structured presentation of materials | 63 | 2.90 | 1.027 |
| Privacy of communication (students-faculty) | 63 | 2.89 | .825 |
| Organized and systematic presentation of course materials | 63 | 2.81 | .965 |
| Time required to complete coursework | 63 | 2.65 | 1.003 |
| Electronic submission of assignments | 63 | 1.87 | 1.143 |
| Flexibility to accommodate social activities | 63 | 1.84 | 1.298 |
| Flexibility to accommodate work | 63 | 1.65 | 1.259 |
| Valid N (listwise) | 57 | | |

The scatterplot (Figure 1) was created by using the means of all 28 variables which students rated both in terms of their importance in deciding to pursue an online or face-to-face course and in terms of the likelihood of those variables being present in an online or face-to-face environment (using the same scale as in the survey where the x-axis represents the probability of a variable being a characteristic of an online course (1) or a face-to-face course (5) and the y-axis represents the importance of this factor---(5) most important and (1) least important). Based on the above, it appears that student participants seem to believe that there is a slightly greater chance that the variables that are most important to them are more likely to be a characteristic of a face-to-face (a few more variables appear towards the upper right side) than an online course (more variables would appear on the upper left side).

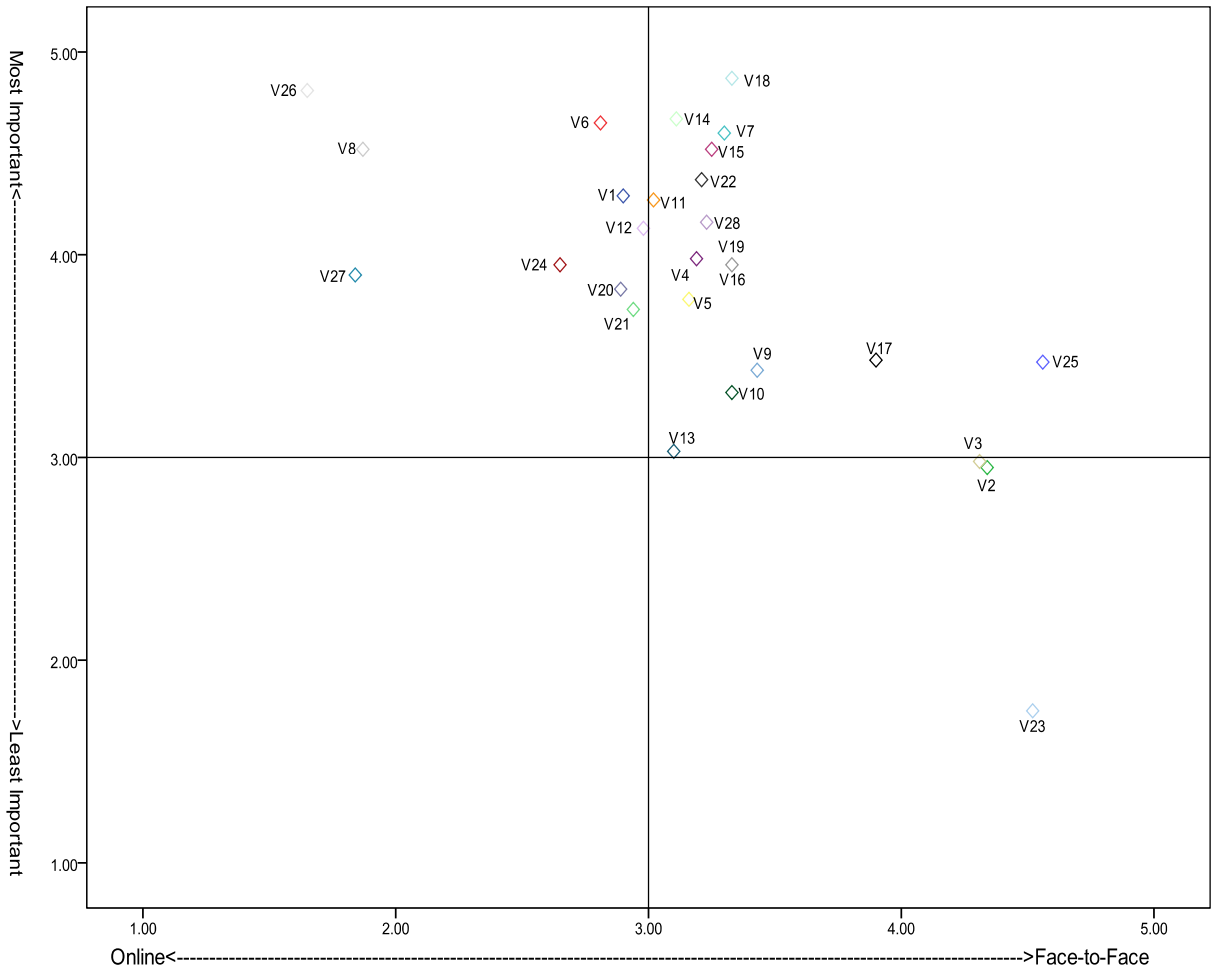


**Figure 1: Comparison of Important Factors with Likelihood of Presence in an Online vs. Face-to Face Course**

Legend:

| |
|---|
| V1: Highly-structured presentation of material |
| V2: Opportunity for live interaction/discussion between faculty and students |
| V3: Opportunity for live interaction/discussion among students |
| V4: Opportunity for interaction/discussion between faculty and students |
| V5: Opportunity for interaction/discussion among students |
| V6: Organized and systematic presentation of course materials |
| V7: Timely feedback to questions |
| V8: Submitting assignments electronically |
| V9: Opportunity for communication between faculty and students outside of normal class times |
| V10: Opportunity for communication among students outside of normal class times |
| V11: Greater intellectual challenge |
| V12: Objective tests |
| V13: Tests that contain discussion questions |
| V14: More knowledge gained |
| V15: More skills acquired |
| V16: Higher costs of tuition and fees |
| V17: Higher travel costs |
| V18: Accreditation of the institution offering the courses |
| V19: State Department of Education approval of the institution offering the courses |
| V20: Privacy of communications between students and faculty |
| V21: Privacy of communications among students |
| V22: Access to information (resource materials) |
| V23: On-campus exams |
| V24: More time required to complete coursework |
| V25: More commuting time to and from classes |
| V26: Schedule flexibility to accommodate work responsibilities |
| V27: Schedule flexibility to accommodate social activities |
| V28: Ability to secure employment after graduation |

**Figure 1 (continued).**

In terms of the overall attitude towards online education, student participants indicated a positive viewpoint regarding online education (using a scale of 1-5 where 1 indicates a very favorable attitude and 5 a very unfavorable attitude towards online education). Specifically, as illustrated in Table 8, almost 75% of the student participants expressed a very favorable or favorable attitude towards online education.

**Table 8: Overall attitude toward online education**

| Attitude | Frequency | Percent | Mean | Std. Deviation |
|---|---|---|---|---|
| Very favorable | 30 | 49.2 | | |
| Favorable | 15 | 24.6 | | |
| Neutral | 5 | 8.2 | | |
| Unfavorable | 6 | 9.8 | | |
| Very unfavorable | 5 | 8.2 | | |
| Total | 61 | 100 | 2.03 | 1.32 |

Student Commentary Regarding the Future of Online Education

In the final section of the survey, students were asked to provide written commentary regarding their predictions of the future of online education. A clear majority of the students stated that online education will continue to grow significantly in the future (regardless of their perception of whether this expansion has a positive or negative effect). The convenience and flexibility factors associated with online education where cited as the main factors behind the likely continuous expansion of online learning. According to one student:

> *More and more students will pursue on-line education because of the flexibility of scheduling work and school activities, ease of access, and the development of the cyber world. Though it is often more difficult to learn the concepts presented via online education (because the student is responsible for making the time to review and understand materials), it is much easier to have a balance between work and school and life.*

The questions of quality and whether an online program is as effective as a face-to-face program were also reflected in the student's commentary. This issue is evident in the two illustrative student comments below:

> *For people with full-time jobs, the flexibility is a big plus. I think on-line education is likely to increase. Quality is important here; many programs are not good enough academically, and how on-line education is perceived is important.*

> *Online education has taken off in the last 5 years. I see it expanding even more in the next 5 years. However, the only problem I see is the value of the education. While most people would love the idea of online education, I don't feel that they truly understand the work that is involved in pursuing a degree online. It is actually harder than in an on-campus structure. I think many people are going to thus look more and more to online education without knowing what is involved. Schools, in order to keep up with the demand, are going to lower the standards of the online classes/program to accommodate more students. I think that while accredited and better schools will not do this, many newer schools will. I think that this is going to eventually determine the perception and the value of online degrees in the future.*

Two areas of concern associated with the student experience of online coursework are related to the areas of tuition rates and the performance of technology across different courses. As students indicated:

> *There needs to be much greater standardization of how the professors teach, how they utilize the online tools, and how they interact with students. In addition, the online portal (BBVista with Drexel) should be much more user-friendly. Even now, over two years after I started this program, the same bugs are present in the system. I find this completely unacceptable. Similarly, due to the greatly reduced costs of administering an online program, the tuition should be discounted. Overall I believe the execution of an online education to be in its infancy, and if I could go back I would not have enrolled in this program.*

*I think the adoption of on-line education will grow in the future. As more accredited online programs are introduced, more students will value the convenience over the traditional college experience. One hopeful prediction will be the decrease in cost that occurs with the growth in the adoption rate of online course taking. Currently the price is greatly inflated, and without the tuition assistance from my company I would have never been able to enter in the Drexel program.*

*With the trend toward globalization, more universities will be offering courses and degrees in an online format. However, there does need to be a difference in cost structure for the students as the level of online courses today (especially at Drexel) is not the same level as on-campus courses, and therefore the costs should be lowered.*

Despite the few areas of concern highlighted by some of the students, the qualitative comments convincingly support the quantitative findings of the survey. Accordingly, the majority of the students hold an overall positive perception of their online educational experience as indicated by the comments below:

*Online education is definitely a growing trend that is not only beneficial for students, but also colleges/universities and especially the future workforce.*

*The number of on-line students will grow due to the flexibility and quality of on-line education.*

*On-line education will continue to grow and flourish since the technology is steadily improving to allow for better delivery of content.*

Faculty Participants

The faculty survey questionnaire was administered electronically using the Snap Survey software. Thirty-eight faculty members who taught at least one course for the MBA online program during the last year were invited to participate. The survey was available during the winter quarter of 2010 (January-March). Reminder messages were sent during the survey availability period in order to maximize the response rate. Overall, 23 faculty members participated in the survey, a response rate of 60.52%.

I. Demographics

As illustrated by the tables below, the majority of the faculty participants held an appointment at the assistant level or below (60.9%) (Table 9). A clear majority of the participants (78.2%) were full-time faculty and were equally divided between those with tenure-track and non-tenure-track appointments (Table 10). Just over one-quarter of the faculty members (26.1%) had taken an online course in the past (Table 11), whereas 65.2% had taught four or more online courses during their career (Table 12).

**Table 9:Faculty Rank**

| Rank | Frequency | Percent |
|---|---|---|
| Professor | 5 | 21.7 |
| Associate | 4 | 17.4 |
| Assistant | 6 | 26.1 |
| Instructor | 8 | 34.8 |
| Total | 23 | 100.0 |

**Table 10: Nature of Faculty Appointment**

| Appointment | Frequency | Percent |
|---|---|---|
| Full-time, tenure track | 9 | 39.1 |
| Full-time, non-tenure track | 9 | 39.1 |
| Part-time | 5 | 21.7 |
| Total | 23 | 100.0 |

**Table 11: Have you ever taken an online course?**

| Response | Frequency | Percent |
|---|---|---|
| Yes | 6 | 26.1 |
| No | 17 | 73.9 |
| Total | 23 | 100.0 |

**Table 12:Number of Online Courses Taught**

| Number of Courses | Frequency | Percent |
|---|---|---|
| 0-1 | 4 | 17.4 |
| 2-3 | 4 | 17.4 |
| 4-5 | 6 | 26.1 |
| 6 or more | 9 | 39.1 |
| Total | 23 | 100.0 |

II. Faculty attitudes and opinions toward online education

As indicated by Table 13 below, a clear majority of the faculty participants *would like to* or *are definitely going to* teach an online course in the future. However, when asked to indicate their overall attitude toward online education (Table 14), fewer than half of the faculty members highlight a positive attitude (47.8%), whereas about 30% express a neutral stance, and about one-fifth an unfavorable view.

**Table 13: Choice Based on Current Experience with Online Coursework**

| Choice | Frequency | Percent |
|---|---|---|
| Not teach a course online | 4 | 17.4 |
| Consider teaching a course online | 4 | 17.4 |
| Like to teach a course online | 6 | 26.1 |
| Definitely teach a course online | 9 | 39.1 |
| Total | 23 | 100.0 |

**Table 14: Overall Attitude Toward Online Education**

| Attitude Toward Online Education | Frequency | Percent |
|---|---|---|
| Very favorable | 8 | 34.8 |
| Favorable | 3 | 13.0 |
| Neutral | 7 | 30.4 |
| Unfavorable | 5 | 21.7 |
| Very unfavorable | 0 | 0 |
| Total | 23 | 100.0 |

Faculty participants were also asked to indicate the importance they believe students attribute to 28 variables on a scale of 1 to 5 (with 1 being not at all important, and 5 extremely important) when making course environment decisions (online vs. face-to-face). According to the faculty participants, the five most important variables that would affect the students' decision to enroll in an online or face-to-face course are:

1. Schedule flexibility to accommodate work responsibilities
2. Opportunity for interaction and discussion between faculty and students
3. Organized and systematic presentation of course materials
4. Ability to secure employment after graduation
5. Timely feedback to questions

The complete ranking of the 28 variables with the corresponding mean and standard deviation is illustrated in Table 15. The faculty participants highlighted three of the five most important variables listed as important by the student participants when making course environment decisions. The ranking of accreditation (the most important variable listed by the student participants in determining whether to pursue an online or face-to-face program) by faculty members is particularly noteworthy. While still considered important in determining the students' decision to enroll in an online or face-to-face course, it was not considered to be one of the top five factors influencing course choice.

In the second part of the survey, faculty participants were asked to indicate whether the same 28 variables rated in the previous question were more likely to be characteristics of an online or a face-to-face course. As indicated in Table 16, only one of the five factors deemed critical from the faculty when students decide to puruse a program online or face-to-face (schedule flexibility to accommodate work

responsibilities) is most likely to be found in an online setting. Table 16 summarizes the results from the faculty group indicating which of the variables are more likely to be characteristic of an online or face-to-face course (with 1 indicating the likely presence in an online course, and 5 the likely presence in a face-to-face course).

The overall attitude toward online education from the faculty perspective and the possible effect of the nature of the faculty appointment (full-time vs. part-time) are summarized on Table 17 (where 1 represents a very favorable attitude toward online education, and 5 a very unfavorable attitude). Independent-samples t-tests were conducted in order to compare the overall attitude means for the faculty groups specified below. No statistically significant difference was found (Appendix E includes the T-test scores).

Comparison of Overall Attitude Means Between Faculty and Students

An independent-samples t-test was conducted in order to compare the overall attitude toward online education on the part of the student and faculty participants. No significant difference was found for students (M=2.03, SD=1.31) and faculty (M=2.39, SD=1.19); t (82)=1.14, p=.26 (two-tailed).

**Table 15: Importance rating of factors determining course environment (faculty)**

| Factor | N | Mean | Std. Deviation |
|---|---|---|---|
| Flexibility to accommodate work | 23 | 4.57 | .507 |
| Opportunity for interactions/discussion (faculty-students) | 22 | 4.36 | .727 |
| Organized and systematic presentation of course materials | 23 | 4.35 | 1.229 |
| Ability to secure employment after graduation | 23 | 4.22 | 1.043 |
| Timely feedback | 23 | 4.22 | .850 |
| Accreditation | 23 | 4.13 | .968 |
| Highly structured presentation of materials | 23 | 4.00 | 1.279 |
| Access to information | 23 | 4.00 | 1.128 |
| Opportunity for interactions/discussion (students) | 23 | 3.96 | .976 |
| Skills acquired | 23 | 3.96 | .706 |
| Knowledge gained | 23 | 3.91 | .848 |
| Time required to complete coursework | 23 | 3.87 | .626 |
| Communication outside class time (students) | 23 | 3.83 | 1.072 |
| Communication outside class time (faculty-students) | 23 | 3.83 | 1.029 |
| Electronic submission of assignments | 23 | 3.83 | 1.466 |
| Costs of tuition and fees | 23 | 3.83 | .887 |
| Commuting time | 23 | 3.61 | 1.373 |
| Flexibility to accommodate social activities | 23 | 3.61 | .891 |
| Opportunity for live interactions (faculty-students) | 22 | 3.59 | 1.098 |
| Opportunity for live interactions (students) | 23 | 3.57 | 1.080 |
| Intellectual challenge | 23 | 3.57 | .945 |
| Privacy of communication (students-faculty) | 23 | 3.39 | 1.340 |
| Objective tests | 23 | 3.30 | 1.259 |
| Travel costs | 23 | 3.26 | 1.251 |
| Approval from State Dpt. of Education (institution) | 23 | 3.22 | 1.204 |
| Privacy of communication (students) | 23 | 3.04 | 1.296 |
| Tests with discussion questions | 23 | 2.91 | 1.083 |
| On-campus exams | 22 | 1.77 | .973 |
| Valid N (listwise) | 20 | | |

**Table 16: Characteristics of an online vs. face-to-face course (faculty)**

| Factor | N | Mean | Std. Deviation |
|---|---|---|---|
| On-campus exams | 23 | 4.43 | 1.273 |
| Commuting time | 23 | 4.17 | 1.466 |
| Opportunity for live interactions (faculty-students) | 23 | 4.09 | .996 |
| Opportunity for live interactions (students) | 23 | 3.74 | 1.251 |
| Communication outside class time (faculty-students) | 23 | 3.57 | .896 |
| Travel costs | 23 | 3.57 | 1.590 |
| Ability to secure employment after graduation | 23 | 3.52 | .790 |
| Knowledge gained | 23 | 3.39 | .839 |
| Opportunity for interaction/discussion (faculty-students) | 23 | 3.39 | 1.076 |
| Skills acquired | 22 | 3.36 | .790 |
| Communication outside class time (students) | 22 | 3.23 | 1.066 |
| Approval from State Dpt. of Education (institution) | 23 | 3.22 | .671 |
| Accreditation | 23 | 3.17 | .717 |
| Tests with discussion questions | 23 | 3.13 | .694 |
| Timely feedback | 23 | 3.13 | 1.100 |
| Intellectual challenge | 23 | 3.09 | .996 |
| Opportunity for interactions/discussion (students) | 23 | 3.09 | 1.240 |
| Objective Tests | 23 | 3.04 | .706 |
| Costs of tuition and fees | 23 | 2.91 | .900 |
| Privacy of communication (students-faculty) | 23 | 2.87 | .694 |
| Access to information | 22 | 2.86 | .560 |
| Privacy of communication (students) | 23 | 2.78 | .518 |
| Organized and systematic presentation of course materials | 23 | 2.78 | 1.043 |
| Time required to complete coursework | 23 | 2.61 | .839 |
| Highly structured presentation of materials | 22 | 2.41 | 1.098 |
| Electronic submission of assignments | 23 | 2.30 | 1.063 |
| Flexibility to accommodate social activities | 23 | 1.65 | 1.071 |
| Flexibility to accommodate work | 23 | 1.43 | .945 |
| Valid N (listwise) | 20 | | |

**Table 17:Comparison of Means for Selected Faculty Sub-Groups**

| Attitude Toward Online Education | Mean | Std. Deviation |
|---|---|---|
| All faculty (N=23) | 2.39 | 1.20 |
| Full-time faculty (N=18) | 2.28 | 1.18 |
| Part-time faculty (N=5) | 2.80 | 1.30 |
| Faculty with no student experience (N=17) | 2.65 | 1.22 |
| Faculty with student experience (N=6) | 1.67 | .82 |

Faculty Commentary Regarding the Future of Online Education

In the concluding section of the survey, faculty members were also asked to provide written commentary regarding their predictions for the future of online education. While a clear majority of faculty members acknowledge the fact that online education will continue to grow, there is no clear consensus as to whether this is a positive or negative outcome. According to one faculty member, the growth potential of online education "*…is a necessary evil. Once live online classes will be easier to conduct their availability in higher-status institutions will grow*."

Faculty members seem to acknowledge that the driving force behind the future of online education is its revenue potential. According to one faculty member:

> *… On-line education will continue to grow for two basic reasons: 1) It accommodates the needs of students who are working and cannot attend on-campus classes; and 2) The university has the ability to extend its offerings to more potential students and gain revenue.*

A number of faculty members indicated that, despite the expected (and, to some degree, welcomed) growth of online education offerings, the role of face-to-face instruction will continue to be important (in the form of hybrid courses). Faculty members stated that:

> *There will be more demand for online courses. Students will be more demanding. There will be a high level of expectations from faculty members and students alike and even better technologies to help and facilitate course delivery.*
>
> *There will be more courses offered online. There will also be hybrid courses that include partial online courses. Online courses will eventually lead to education level convergence across the globe.*
>
> *I see more courses being offered online in the future. I also think hybrid courses will become more popular at both the graduate and undergraduate level.*
>
> *Online learning will continue to expand due to less time for working professionals to commute to a campus. Also, as technology continues to improve the student experience, more and more competition for students will grow. However, I do think live classroom interaction is a very important missing learning/networking element (especially in business education) for online education.*

Areas of concern as expressed by faculty members include the performance of the required technology that is necessary for delivering the online courses, the perceived lack of interactions in an online setting, and academic honesty issues. A few illustrative comments summarizing the above issues are provided below:

> *I've taught about 22 classes—split between in-class and on-line. Despite the tools, I've found little interaction, discussion, and challenge in the online versions. The online tools are weak (i.e., threaded discussions, etc.), time-consuming to prepare, and quickly out of date. They discourage bringing fresh thinking into the process—at least in their present form—and prevent any real dialogue with students.*
>
> *Online education will grow exponentially despite the difficulty in delivering instruction. More training and incentives will be needed to ensure that growth is matched by improvements in student and instructor satisfaction.*
>
> *I believe it will grow but need to have more security precautions to make sure that it is valid (i.e., someone else is not getting the degree for the student).*
>
> *Online education is likely to be a bit of a fad. Over time, we will see its limitations, and its popularity will likely decline.*

**Interview Results**

For the purposes of triangulating the survey findings, follow-up interviews were conducted with students and faculty members who indicated their willingness to participate when completing the survey. In addition, interviews with three key members of the MBA Online program were conducted in order to gain insight into the administrative perspective regarding online education. Overall, the interview results provided verification for some of the attitudes and issues highlighted in the survey. Participants were able to share their experiences and viewpoints regarding online education and described them in their own words. The following sections describe the main themes that emerged from the interviews for all participant categories.

Student Participants

Interviews with student participants were conducted in March and April 2010. The majority of the interviews were conducted over the phone in light of the dispersed nature of the population. Two student interviews were conducted face to face. Overall, 11 students participated in the interview process.

The interview transcripts clearly indicate that the convenience and flexibility aspects of online education are, in the students' eyes, the main driving force behind the growth of online education offerings. For the vast majority of the students who were interviewed, the flexible nature of online course delivery was the primary motivation for enrolling in the MBA Online program. Similarly, students reported that the main factors that would discourage students from enrolling in an online program include:

1. The perception of a lower quality standard compared to face-to-face courses (stemming from the tradition of online diploma mills).

2. The expectation of reduced communication opportunities with students and professors.
3. The need for critical time-management skills in order to keep up with online coursework.

A few students reported that that they, too, shared some of the above concerns when they first enrolled in the MBA Online program. However, at the time of the interview, none of the students reported that any of those issues was detrimental to their online education experience.

Students were also asked to comment on the "networking" feature typically associated with MBA programs. Half of the student respondents indicated that their primary focus was to develop the necessary management skills through the MBA Online program. Therefore, those students who are currently employed did not deem the networking component important. The rest of the students felt that, due to the interactive activities that are offered in the online courses, as well as the residency requirement of the program, they can network as effectively with their classmates as they would in a face-to-face program.

Overall, student participants projected a very positive viewpoint regarding their online education experience. One student stated that the decision to enroll in the online MBA program was *the best decision he has ever made.* The online nature of the program seems to be particularly attractive to the students who travel frequently and cannot be physically present on campus to complete their MBA. Every student who was interviewed indicated that if they were given a choice, they would pursue the same program in an online setting once again. The MBA Online students who were

interviewed for this study felt that they did not miss out on any elements compared to their face-to-face counterparts. Furthermore, students agreed that online education will continue to grow, and online degrees will become more commonplace and accepted in the future.

Students also highlighted two areas in which their online educational experience could be improved. Specifically, students cited the lack of uniformity across different courses as a potential issue that they would like to see addressed. As students indicated, there is a great degree of variance within certain courses in the program, in terms of quality of instruction, level of interactions, and feedback to students. Furthermore, many of the students indicated that they would like to see technology tools in the online environment utilized more in order to increase the degree of interactions among students and faculty. For example, a few students reported that the use of synchronous technologies in some of their courses (such as Wimba Classroom, a synchronous tool that allows real time audio, video, and text communication) was an experience that they found very rewarding.

Overall, student participants held a positive view regarding online education in general, in light of their good experience in the MBA Online program. Students indicated that the online version of the program provided them with an opportunity to continue their education, which they would not have been able to do otherwise, while at the same time maintaining the effectiveness of the face-to-face counterpart. This positive attitude is highlighted by the fact that, despite the areas of improvement discussed above, every student who was interviewed stated convincingly that they would pursue this program once again if given a choice.

Faculty Participants

Interviews with faculty participants were conducted in March and April 2010. With the exception of one faculty member who did not reside in close proximity to the university, faculty interviews were conducted face to face. Overall, five faculty members participated in the interview process.

The interviews with faculty members revealed a mixed perspective on online education. While all faculty members who were interviewed acknowledged that online offerings will continue to expand, they raised a few concerns associated with teaching online courses and the implications of those concerns for the perceived value of online degrees. Faculty concerns focused on the following areas:

1. The limitations imposed on the type of interactions between students and faculty as a result of the online course delivery mechanisms.

2. The time that is required to teach online courses; most faculty members reported that it takes them at least twice as much time to teach an online versus a face-to-face course.
3. The inability to really "know" the students who are enrolled in online courses.
4. The performance and limitations of the technology used to deliver online courses.

Despite the areas of concern listed above, all but one of the faculty members who were interviewed would teach in an online setting once again. Faculty reported that the benefits associated with teaching online include flexibility in content delivery as well as compensation incentives. Specifically, two faculty members reported that they can plan their workday and fulfill their research and other duties more easily as a result of the

asynchronous nature associated with the teaching of online courses. Furthermore, the college in which the study was conducted provides important financial incentives for both full-time faculty (when teaching an online course as an overload) and part-time faculty. On average, payment for an online course assignment (not as part of a regular course load) would likely exceed $10,000.

Faculty members seemed more open and willing to endorse the delivery of hybrid courses as they felt that this kind of course delivery can account for the shortcomings of the fully online instruction. Overall, faculty members clearly indicated that they acknowledge that online education will continue to expand. At the same time, they indicated that would like to see technology features associated with online learning utilized more in order to improve the students' experience. According to one faculty member: *"Online courses provide an uneven experience, and I would like to really be instructed on how to teach online."* Despite the active presence of an instructional design team at the college, this faculty member indicated that their perception of this specific group is somewhere to go to when there is a "problem." In addition to troubleshooting, this faculty member would like to see the incorporation of "best practices" modules and training.

In conclusion, the faculty members who were interviewed for the purposes of this study highlighted a mixed attitude toward online education; two faculty members fully supported the online delivery mode (despite the issues described above), while two expressed a neutral stance indicating that there are both opportunities and challenges associated with teaching online. Another was very critical of online education, stating

that it is not an effective mode of delivery for teaching the soft skills required of the business curriculum.

Administrative Perspective

In order to obtain the administrative perspective on online education, interviews were conducted with the program director of the MBA Online program, the director of instructional design of the college, and the dean of the college in April 2010.

According to the program director, the convenience aspect is the most important factor that motivates students to take online courses, especially for those who travel often. It was also pointed that the fear of lack of engagement associated with the online environment and "not knowing what to expect" are variables that would discourage students from enrolling in online programs. The program director also argued that the "stigma" associated with online courses (the perception that online programs are not as valuable as their face-to-face counterparts) has significantly declined over the years. The program director indicated that employers tend to view online MBA programs much more favorably now than in the past, especially if the program is accredited. The rate of reimbursement provided by employers to students was also cited as evidence of this shift in perception of online degrees from the employer's perspective. According to the program director, another recent change has been that employers provide the same reimbursement rate for online and face-to-face programs.

The program director indicated that one of the main reasons that faculty teach online is the recently enacted financial incentives offered by the college. According to the program director, the extra compensation has made "a big difference" in the number of faculty members who are willing to teach online. The additional workload associated with teaching online courses was also cited as a reason for discouraging faculty from

teaching online, something the program director found particularly applicable to research- active faculty.

The program director believes that online education will continue to grow due to its revenue-generation potential and the ability to reach out to students and export the school's brand without geographical constraints. Overall, the she described her attitude toward online learning as very positive. Finally the program director articulated her vision for online education: the goal is "to give a comparable educational experience to online and face-to-face students" that will involve the same level of engagement and quality. She felt that this vision has materialized in the MBA Online program due to cohort structure; students can rely on a built-in network and can potentially gain even more from the online program than their counterparts can in a face-to-face program.

The director of instructional design also argued that online education will continue to grow in the future. The director drew a clear distinction between the perceptions that are held from the faculty and students that are accurate and those that are misguided. Particularly noteworthy was the comment about the *perceived* lack of interactions associated with online courses. According to the director, the college provides the necessary support structure for faculty members, and what can or cannot be done is essentially the choice of the faculty. He clearly articulated a vision for online education that involves:

> …. *reaching out to even more students with the brand of the college as the technology advances and counters the misconceptions and problems typically associated with online learning*.

The dean of the school also echoed some of the themes outlined by the program director and the director of instructional design. Once again, flexibility associated with

online learning was cited as one of the primary reasons for the enrollment growth. A second reason that could explain the expansion of online education offerings involves an increasing number of students who are attuned to the use of technology. The perception of online degrees being similar to the old correspondence learning system is a variable that would discourage students from enrolling in online courses. The dean mentioned that there is a “dichotomy” of two types of schools associated with online education: the general online providers (upcoming schools or organizations toward which students may be skeptical) and the traditional institutions that are now engaged in online learning and provide good quality.

According to the dean, the three main factors that motivate faculty to teach online are: financial incentives for teaching online, flexibility associated with teaching online, and the fact that course materials are easier to update online than in a face-to-face setting. On the other hand, the fact that faculty teaching online are required to follow an established process of learning assessment and the additional time constraints that pertain to online interactions result in an increased workload, which is the main factor that would discourage faculty from teaching online. The dean indicated that education, support, and mentorship programs are available to faculty who wish to improve their online teaching skills, and made clear that this would the direction in which the college would be moving in the future.

In terms of the future of online education, the dean foresees more and more students pursuing online programs. He indicated that face-to-face interaction is valuable, and therefore blended and hybrid models would be used even more. He articulated a

vision in which the online programs at the college would be expanded in both undergraduate and graduate programs and would include:

1. Fully online programs and courses
2. Blended programs (with half of the courses offered online and half offered face-to-face)
3. Hybrid programs (for which the same courses will be offered in a mix of a face-to-face and online formats).

Overall, the dean clearly stated that online education "will stay for us" in the foreseeable future, and that programs need to adapt in order to include new and exciting features in the delivery of those courses, including, but not limited to, simulations, games, and guest speakers.

**Summary of Results and Research Questions**

This study attempted to answer the following research questions:

1. What are the most important factors that affect the students' decision to enroll in an online program?

The perception of flexibility and convenience associated with online programs was the most important factor that motivated the students who participated in this study to enroll in their online program. In addition, the perception of a lesser value and the limited interactions of online courses were cited as reasons that would discourage students from enrolling in online courses and programs. The five most important factors affecting students' decision to pursue an online or face-to-face degree were:

i. Accreditation of the institution offering the courses

ii. Schedule flexibility to accommodate work responsibilities

iii. Knowledge gained

iv. Organized and systematic presentation of course materials

v. Timely feedback to questions.

According to the students, only two of the above variables were more likely to be characteristics of an online or face-to-face course.

2. What are the most important factors that affect the faculty's decision to teach in an online program?

Financial incentives and the perception of being able to teach courses on one's own time were cited as the two most important motivators for faculty to engage in online teaching and development.

3. What are the students' perceptions regarding the value of online education?

Students in this study viewed online education very favorably. An overwhelming majority of the students would retake the same program in an online setting once again if given the choice.

4. What are the faculty's perceptions of the workload and teaching experience and overall impressions of online education?

Faculty participants acknowledged that online education will continue to grow. However, faculty expressed a mixed view, citing advantages (flexibility, financial incentives) and disadvantages (value, workload) associated with teaching online courses.

5. What is the administrative perspective on online education?

The administration of the college where this study was conducted is the driving force behind the expansion of online education offerings. Online education is

viewed as a vital market of the college's operations, and the online offerings are expected to increase in the future. According to the administrators, online programs are equal in terms of value and effectiveness, compared to their face-to-face counterparts. The administration is committed to providing the tools to the faculty to teach and develop effective online courses, but in this case it would be the faculty's choice to use those tools.

# CHAPTER 5: DISCUSSION

## Overview of Study

The goal of this study was to obtain a multi-faceted perspective on the perceptions of online education held by three key groups: students, faculty, and administration. In light of the increased growth of online enrollment, and their current perceptions, those groups are expected to play a critical role in determining the status of online education. Accordingly, understanding the perceptions of those key groups regarding the value of online education is essential in order to assess the variables that will influence the state of online education in the future. The study was conducted in an MBA Online program, based in an accredited higher education institution that offers both face-to-face and online programs.

In order to study the viewpoint of the three key groups mentioned above, a three-stage data-collection process was followed. First, students and faculty participated in an online survey in which they rated the factors that students deem important when making course environment decisions. In addition, participants indicated whether those factors were more likely to be characteristic of online or face-to-face modes of delivery. Furthermore, students and faculty indicated their overall attitude toward online education (on a favorable/unfavorable continuum) and provided qualitative comments regarding the future of online education.

During the second stage of the study, follow-up interviews were conducted with students and faculty who were willing and able to participate. The purpose of the follow-up interviews was to verify the survey data and, if applicable, to obtain additional insight into the student and faculty viewpoint regarding online education via qualitative data.

Finally, interviews were held with three key administrators affiliated with the online program: the program director of the MBA Online program, the director of instructional design, and the dean of the school where the MBA Online program is offered. Through these interviews, the study attempted to determine the administrative perceptions regarding online education.

**Summary of Results by Significant Points**

The results of the study highlight eight important areas in regard to perceptions of online learning:

1. The results of the survey clearly indicate that students perceive online programs to be *convenient* and *flexible.* Specifically, the terms “convenience” and “flexibility” were cited by almost every student as the prime motivators for pursuing the current program in an online setting.

2. Faculty members concurred that students perceive online courses as convenient and flexible and, as a result, more and more students choose to enroll in online programs.

3. Student participants also cited the accreditation of the institution offering the courses as another critical variable that determines whether to pursue a program in an online or face-to-face environment.

4. Three additional variables reported by students as factors that influence their decision to enroll in a program online or face-to-face are: knowledge gained, organized and systematic presentation of course materials, and timely feedback to questions.

5. Student participants also indicated that only the scheduling flexibility to accommodate work responsibilities and the organized and systematic presentation

of course materials are more likely to be characteristics of an online or face-to-face course. These characteristics were ranked by the students as one of the top five that are more likely to be associated with an online course.

6. The perception of “less frequent” and “less meaningful” interactions between students and faculty was one of the factors that is likely to discourage students from pursuing online courses. In addition, student participants also indicated that, despite the fact that online course delivery has significantly improved over the years, the perception of online programs being less rigorous and valuable is still present in the mindset of the general population and may discourage prospective students from pursuing online programs.

7. On the positive side, faculty participants indicated that they view online courses as being flexible, since they can choose to log in to their course at a convenient time. Furthermore, the financial incentives that are often associated with teaching and developing online courses are another factor likely to motivate faculty to teach online courses. Faculty members also cited the perceived difference in the type of interactions between online and face-to-face courses as a potential drawback of online teaching. A number of faculty members felt that the online environment does not allow them to interact with their students as much, and as a result, they do not get to know the students as well as they would like to. Nevertheless, the main factor that is likely to discourage faculty from teaching online is the perception of the significantly increased workload associated with online courses.

8. The administration of the college where this study was conducted strongly believes that online education will grow in the future. Furthermore, the administration is fully committed to providing the necessary support structure to faculty and students in order to have a rewarding teaching and/or learning experience. At the same time, the administration expects that faculty members will adapt to the demands of online learning and contribute their expertise as required.

**Comparison of Perceptions**

Overall, all three groups (students, faculty, and administration) who participated in this study believe that online education offerings will continue to grow. The students and administration seem to have a very favorable view of online education, though likely for different reasons. Students clearly value the flexibility and convenience associated with online learning as it allows them to complete their program and advance their education; the vast majority of the students who participated in this study would not have been able to obtain their degree in a face-to-face setting due to their increased work responsibilities. As a result, from the student perspective, online education meets an unmet need by providing a venue through which this specific group can continue their studies. The administration, on the other hand, seems to view online education as favorable due to its potential to increase the reach of the school beyond its traditional brick-and-mortar boundaries. In other words, online education is viewed as a powerful recruitment and growth tool.

Despite some drawbacks perceived by faculty members, the majority also seem to recognize the growth potential associated with online education offerings. Specifically, most faculty members believe that online education courses and programs will continue

to expand. However, as mentioned above, the perceived difference in interactions between online and face-to-face courses, as well as the significantly increased workload demands associated with online teaching, result in the faculty view toward online education being less favorable compared to those held by the students and the administration. A t-test comparing the overall attitude means toward online education between faculty and students revealed a not statistically significant difference ($t=1.14$, $p=.26$). However, qualitative commentary provided by students and faculty in the survey and during the interviews illustrates a mixed viewpoint on behalf of the faculty toward online education. Faculty members are appreciative of the flexibility associated with teaching online courses as well as the financial incentives, but may be discouraged from teaching online due to the workload and the perceived difference of interactions between online and face-to-face courses.

One critical variable, cited by all three groups and likely to affect the content and delivery of online courses in the future, is the performance of technology. Specifically, students and faculty are hopeful that technology improvements will allow for more interactions and activities in their online courses. The administration believes that the infrastructure to allow a varied number of interactions in online courses is currently in place, but also forecasts that technological advances will enable faculty and course designers to include additional content and activities in online courses (e.g., simulations, games, live lectures) in order to enhance the learning experience.

**Significance and Implications**

The results of this study provide evidence for a successful model of online education. Despite a few limitations regarding the nature of interactions that are directly

associated with the capabilities of the online course management tools, students are embracing the online mode of learning. The endorsement by the students is particularly significant as it relates to an MBA program. Typically, the learning objectives of the MBA program focus primarily on skills like leadership, entrepreneurship, and communication. In light of those learning objectives, the importance of networking through increased interactions is emphasized throughout the program.

As a result of the limitations of the course management system tools currently in use, one could expect that students would not hold a favorable view regarding the delivery of content in an online setting. However, the results reflect the opposite; the majority of the students believe that they can relate to both their classmates and their professors. One possible explanation regarding the students' viewpoint may have to do with the cohort-based nature of the MBA Online program; all students take the same courses together as a group in a prescribed sequence. Furthermore, students are required to participate in three on-site seminars (lasting three or four days) during the course of the program, which enables them to get to personally interact with their peers. Consequently, the program attempts to address students' expectations for additional interactions through the cohort system and the establishment of a number of face-to-face meetings.

Another implication arising from the results of this study relates to the need for a team-based approach for a successful delivery of an online program. The team-based approach to online programs is based on the premise that all relevant divisions (faculty, instructional designers) responsible for the content and delivery of the online courses collaborate in order to address the challenges associated with the development of the online course content (Hixon, 2008). Part of the success of the MBA online program may

be attributed to the implementation of a team-based approach. This approach involves the faculty, which provides the content of the course; the instructional team, which assists the faculty with the delivery elements and the design of the course; and the administration, which provides the vision and the guidelines for best practices in online learning. It is important to note that the results of this study indicate that the support structure provided for the delivery of online courses is currently underused by faculty members (based on the responses from faculty and the director of instructional design). One possible explanation given by a faculty member for underuse of the support structure is that the instructional design team is often viewed as a resource for addressing technical glitches and technology-performance issues rather than a forum to discuss and promote best practices in online content and delivery. Further research is needed to determine the reasons why faculty members utilize the expertise of the instructional support team, and their rationale for doing so.

Furthermore, the results of this study clearly reveal the importance that both faculty and students attribute to the ability to use interactive features in online courses. The importance of interactions cannot be overstated. While students feel that the current setup of the program provides them with the ability to interact with their classmates, a number of them reported a preference for additional interactions and activities throughout the course. Some faculty members also indicated that in the online environment, the perceived lack of the kind of interactions that they deem most important, such as interpersonal and face-to-face communication, prevents them from teaching the skills they deem critical to the program, and that is a factor that discourages them from teaching online. Both the student and faculty perspectives indicate that the performance of

technology and its ability to provide for interactive tools in an online setting (e.g., simulations, audio discussions, live video sessions) will be key for the success of online courses and programs.

One possible response to the student and faculty preference for additional interactions would be the inclusion of more synchronous activities in the online courses. However, caution needs to be exercised prior to adopting such an approach, due to the implications of the additional workload that would be required of faculty members. Although some faculty currently use interactive and synchronous communication tools in their online courses, not all faculty are willing or able to invest the time in this type of instruction. Furthermore, the addition of several synchronous activities in online courses may undermine the convenience and flexibility aspects that are so appealing to both faculty and students. For example, course participants may be required to log in at specific times and days, and that could significantly decrease the flexibility benefit of online learning as described by students and faculty.

The need to address the variability in terms of content and the degree of interactions between faculty and students in online courses is another implication of the study's results. Students often cited noticeable gaps among different courses that they have taken in the program; many courses provide rigorous content and stimulating interactions, whereas in some other courses students do not feel engaged, due to the lack of those elements. Variance in terms of course content and delivery is not an exclusive characteristic of online education (the same argument can be made for face-to-face courses), so it is noteworthy that such a debate is more often associated with online education. One possible response to the variability issue may be the standardization of

online content. Under this approach, all online courses will have similar content standards, design, and instructional activities. Such an approach would probably not be viewed as favorably in a face-to-face setting but may be necessitated in an online setting to ensure high standards of learning outcomes and student learning experiences. Further research should be done to determine whether there is a way through which the use of the same course-management system can be sufficient in ensuring that instructional standards have been met across all online courses of a given program.

The study also shows that there is a clear need for all faculty to adapt to the new online paradigm in light of the clear expectation of continuous expansion of online courses and programs. In addition to developing the necessary skills to teach and develop online courses, it is important that faculty are involved in the decision-making process associated with online course and program offerings in order to ensure the rigor of the content provided. Given the fact that the majority of the academic institutions consider online education to be a critical aspect of their long-term strategy (Allen & Seaman, 2008), the faculty have a responsibility to ensure that comparable learning outcomes and experiences to the face-to-face offerings are provided. Due to the expectation of increased online offerings in the future, as well as the importance of faculty involvement toward this effort, faculty and administration will need to address copyright and workload implication issues. For example, policies (ideally at the institutional) level will need to delineate ownership of online course materials and faculty compensation rates to account for the expectation of the continuous proliferation of online courses and programs.

Furthermore, this study provides some evidence (from both students and the administration) that employers now seem to be more receptive to online courses than in

the past. The majority of the students who were interviewed in this study reported that the online MBA program enables them to advance within their organization. In addition, their respective employers favorably view the fact that students can pursue the specific program without disrupting their work responsibilities. On the other hand, the administration cited the increased reimbursement rates provided to students from the employers as evidence of employer acceptance of the value of the online degree. All of those factors are likely to contribute to the expansion of online education and to the improvement of the quality of these programs.

**Limitations**

This study has three limitations that one must consider when attempting to determine the impact of the results. First, the study looked at perceptions of online education held by key stakeholders in only one program (MBA Online) at only one academic institution. Therefore, one should exercise caution when generalizing the results. However, the perspectives of the key stakeholders were examined in detail and a high response rate (more than 60%) was received in the primary data-collection instrument of the study (online survey). Consequently, a case could be made that the results can be seen as representative of the specific group and of similar MBA online programs.

Second, the employers' perceptions regarding online courses and programs were not directly examined, since the study focused on internal stakeholders' perspectives. However, students and faculty were asked to rate the likelihood of obtaining employment after graduation based on having an online or face-to-face degree. While faculty indicated that a job offer is more likely for a candidate with a face-to-face degree, students did not feel that this variable is very important in making a decision to pursue an online program.

This discrepancy may be explained by the fact that the majority of the student participants are already employed. Nevertheless, the employers' views of online education warrant further research because the value of a degree as an employment credential is an important factor according to faculty and students.

Finally, the bias of self-selection may partially explain the difference in overall attitude between students and faculty. A case could be made that students choose the delivery mode that they feel most comfortable with and believe they can succeed in, thus the favorable view of students toward online education. Nevertheless, it is equally possible that students who enrolled in the online program did not enjoy it but felt compelled to stay in it once they started, and thus hold a less favorable view toward online education.

**Future Research**

The following themes emerging from the results of this study warrant further research. First, there is a need to study perspectives on online education in a multi-faceted way. This is the only way to obtain a comprehensive outlook on the future of online education. Accordingly, this was the first study that attempted to collect data on the perceptions of online education from three key groups associated with one online program. Future studies should continue this trend and comprise of more than one online program as well as the perceptions of more than three groups, including employers and the general public.

More studies are needed to examine the faculty outlook on online education. While this topic has been explored, the expectation of continuous growth of online offerings and the implications for the faculty warrant further research. Particular emphasis should be placed on the areas of faculty workload, copyright, compensation,

and the associated policies and issues that would determine how faculty respond to the expansion of online education.

Further research on the administrative perspective (at all levels) regarding online education is also needed. Specifically, future research should focus on identifying areas of agreement among different stakeholders of academic institutions (e.g., faculty, instructional designers, and deans) regarding the value of online education. Furthermore, the effectiveness of the team-based approach to online development should also be researched to ensure that online offerings continue to provide a valuable learning opportunity.

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# APPENDIX A: PERMISSION TO USE SURVEY INSTRUMENT

**From:** Ronald B Wilkes (rbwilkes) [mailto:rbwilkes@memphis.edu]
**Sent:** Wednesday, January 14, 2009 7:16 PM
**To:** Linardopoulos,Nikolaos
**Subject:** RE: Permission to Use Survey Instrument

Nick,

I have attached copies of the student and faculty survey instruments. You are welcome to use them.

We have published a series of articles regarding perceptions of online degree programs using variations on these instruments. The most recent is "Employers' Perceptions of Online Degree Programs" just published in Encyclopedia of Distance Learning, Second Edition, 2009. In addition to the article you cited, we have also looked more in depth at student perceptions (both high school and college) and at a comparison of students and graduate school admissions officers.

I hope things go well with your research.

Ronnie Wilkes

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**From:** Linardopoulos,Nikolaos [nl33@drexel.edu]
**Sent:** Tuesday, January 06, 2009 12:36 PM
**To:** Ronald B Wilkes (rbwilkes)
**Subject:** Permission to Use Survey Instrument

Hello Dr. Wilkes,

My name is Nick Linardopoulos and I am doctoral student in the School of Education at Drexel University in Philadelphia. I am currently working on my dissertation proposal dealing with the student and faculty perceptions of online learning.

I came across your article titled *A Comparison of Faculty and Undergraduate Students' Perceptions of Online Courses and Degree Programs* in the Journal of Information Systems Education .

I would like to ask for your permission to use your survey instrument in my study if available or simply use the questions from the article (the only modification is that I will be surveying graduate students).

Thank you in advance for your time and help.

Best regards,

Nick Linardopoulos

# APPENDIX B: STUDENT SURVEY QUESTIONNAIRE

## Student survey of attitudes and opinions toward online and on-campus courses

### Background Information

**2.** **What is your gender?**

- ○ *Male*
- ○ *Female*

**3.** **How many miles is it from your home to the nearest college or university?**

[ ]

**4.** **What is the zip code at your home?**

[ ]

**5.** **How many on-line courses have you completed?**

- ○ *0-1*
- ○ *2-3*
- ○ *4-5*
- ○ *6 or more*

### Attitudes and Opinions Towards On-line Education

**6.** **Assuming you had a choice and based on your current experience with on-line coursework, you would:**

- ○ *Not take a course on-line.*
- ○ *Consider taking a course on-line.*
- ○ *Like to take a course on-line.*
- ○ *Definitely take a course on-line.*

**7.** **How important to you are each of the following issues in deciding whether to take courses on-line or on-campus?**

| | *1=Not at all important* | *2* | *3* | *4* | *5=Extremely Important* |
|---|---|---|---|---|---|
| Highly-structured presentation of material | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Opportunity for interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Organized and systematic presentation of course materials | ○ | ○ | ○ | ○ | ○ |
| Timely feedback to questions | ○ | ○ | ○ | ○ | ○ |
| Submitting assignments electronically | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication between faculty and students outside of normal class times | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication among students outside of normal class times | ○ | ○ | ○ | ○ | ○ |
| Intellectual challenge | ○ | ○ | ○ | ○ | ○ |
| Objective tests | ○ | ○ | ○ | ○ | ○ |
| Tests that contain discussion questions | ○ | ○ | ○ | ○ | ○ |
| Knowledge gained | ○ | ○ | ○ | ○ | ○ |
| Skills acquired | ○ | ○ | ○ | ○ | ○ |
| Costs of tuition and fees | ○ | ○ | ○ | ○ | ○ |
| Travel costs | ○ | ○ | ○ | ○ | ○ |
| Accreditation of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| State Department of Education approval of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications between students and faculty | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications among students | ○ | ○ | ○ | ○ | ○ |
| Access to information (resource materials) | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| On-campus exams | ○ | ○ | ○ | ○ | ○ |
| Time required to complete coursework | ○ | ○ | ○ | ○ | ○ |
| Commuting time to and from classes | ○ | ○ | ○ | ○ | ○ |
| Schedule flexibility to accommodate work responsibilities | ○ | ○ | ○ | ○ | ○ |
| Schedule flexibility to accommodate social activities | ○ | ○ | ○ | ○ | ○ |
| Ability to secure employment after graduation | ○ | ○ | ○ | ○ | ○ |

8. **For each of the following issues, indicate how likely you feel they are to be characteristic of an on-line or an on-campus course.**

| | *1=Much more likely of an **on -line** course* | *2* | *3* | *4* | *5=Much more likely of an **on -campus** course* |
|---|---|---|---|---|---|
| Highly-structured presentation of material | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Organized and systematic presentation of course materials | ○ | ○ | ○ | ○ | ○ |
| Timely feedback to questions | ○ | ○ | ○ | ○ | ○ |
| Submitting assignments electronically | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Opportunity for communication between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication among students outside of normal classroom environment | ○ | ○ | ○ | ○ | ○ |
| Greater intellectual challenge | ○ | ○ | ○ | ○ | ○ |
| Objective tests | ○ | ○ | ○ | ○ | ○ |
| Tests that contain discussion questions | ○ | ○ | ○ | ○ | ○ |
| More knowledge gained | ○ | ○ | ○ | ○ | ○ |
| More skills acquired | ○ | ○ | ○ | ○ | ○ |
| Higher costs of tuition and fees | ○ | ○ | ○ | ○ | ○ |
| Higher travel costs | ○ | ○ | ○ | ○ | ○ |
| Accreditation of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| State Department of Education approval of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications between students and faculty | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications among students | ○ | ○ | ○ | ○ | ○ |
| Access to information (resource materials) | ○ | ○ | ○ | ○ | ○ |
| On-campus exams | ○ | ○ | ○ | ○ | ○ |
| More time required to complete coursework | ○ | ○ | ○ | ○ | ○ |
| More commuting time to and from classes | ○ | ○ | ○ | ○ | ○ |
| Schedule flexibility to accommodate work responsibilities | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Schedule flexibility to accommodate social activities | ○ | ○ | ○ | ○ | ○ |
| Ability to secure employment after graduation | ○ | ○ | ○ | ○ | ○ |

**9. My overall attitude toward on-line education is:**

| *1=Very Favorable* | *2* | *3* | *4* | *5=Very Unfavorable* |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

**10. What is your prediction for the future of on-line education?**

# APPENDIX C: FACULTY SURVEY QUESTIONNAIRE

## Faculty survey of attitudes and opinions toward online and on-campus courses

### Background Information

**2. Please indicate your rank:**

- ○ *Professor*
- ○ *Associate Professor*
- ○ *Assistant Professor*
- ○ *Instructor*

**3. Please indicate the nature of your faculty appointment:**

- ☐ *Full-Time Tenured-Track*
- ☐ *Full-Time Non-Tenured Track*
- ☐ *Part-Time*

**4. Have you ever taken an on-line course?**

- ○ *Yes*
- ○ *No*

**5. How many on-line courses have you taught?**

- ○ *0-1*
- ○ *2-3*
- ○ *4-5*
- ○ *6 or more*

### Attitudes and Opinions Towards On-line Education

**6. Assuming you had a choice and based on your current experience with on-line coursework, you would:**

- ○ *Not teach a course on-line.*
- ○ *Consider teaching a course on-line.*
- ○ *Like to teach a course on-line.*
- ○ *Definitely teach a course on-line.*

**7. How important to students do you believe each of the following issues is in deciding whether to take courses on-line or on-campus?**

| | *1=Not at all important* | *2* | *3* | *4* | *5=Extremely Important* |
|---|---|---|---|---|---|
| Highly-structured presentation of material | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Opportunity for live interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Organized and systematic presentation of course materials | ○ | ○ | ○ | ○ | ○ |
| Timely feedback to questions | ○ | ○ | ○ | ○ | ○ |
| Submitting assignments electronically | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication between faculty and students outside of normal class times | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication among students outside of normal class times | ○ | ○ | ○ | ○ | ○ |
| Intellectual challenge | ○ | ○ | ○ | ○ | ○ |
| Objective tests | ○ | ○ | ○ | ○ | ○ |
| Tests that contain discussion questions | ○ | ○ | ○ | ○ | ○ |
| Knowledge gained | ○ | ○ | ○ | ○ | ○ |
| Skills acquired | ○ | ○ | ○ | ○ | ○ |
| Costs of tuition and fees | ○ | ○ | ○ | ○ | ○ |
| Travel costs | ○ | ○ | ○ | ○ | ○ |
| Accreditation of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| State Department of Education approval of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications between students and faculty | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications among students | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Access to information (resource materials) | ○ | ○ | ○ | ○ | ○ |
| On-campus exams | ○ | ○ | ○ | ○ | ○ |
| Time required to complete coursework | ○ | ○ | ○ | ○ | ○ |
| Commuting time to and from classes | ○ | ○ | ○ | ○ | ○ |
| Schedule flexibility to accommodate work responsibilities | ○ | ○ | ○ | ○ | ○ |
| Schedule flexibility to accommodate social activities | ○ | ○ | ○ | ○ | ○ |
| Ability to secure employment after graduation | ○ | ○ | ○ | ○ | ○ |

8. **For each of the following issues, indicate how likely you feel they are to be characteristic of an on-line or an on-campus course.**

| | *1=Much more likely of an **on -line** course* | *2* | *3* | *4* | *5=Much more likely of an **on -campus** course* |
|---|---|---|---|---|---|
| Highly-structured presentation of material | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for live interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for interaction/discussion among students | ○ | ○ | ○ | ○ | ○ |
| Organized and systematic presentation of course materials | ○ | ○ | ○ | ○ | ○ |
| Timely feedback to questions | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Submitting assignments electronically | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication between faculty and students | ○ | ○ | ○ | ○ | ○ |
| Opportunity for communication among students outside of normal classroom environment | ○ | ○ | ○ | ○ | ○ |
| Greater intellectual challenge | ○ | ○ | ○ | ○ | ○ |
| Objective tests | ○ | ○ | ○ | ○ | ○ |
| Tests that contain discussion questions | ○ | ○ | ○ | ○ | ○ |
| More knowledge gained | ○ | ○ | ○ | ○ | ○ |
| More skills acquired | ○ | ○ | ○ | ○ | ○ |
| Higher costs of tuition and fees | ○ | ○ | ○ | ○ | ○ |
| Higher travel costs | ○ | ○ | ○ | ○ | ○ |
| Accreditation of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| State Department of Education approval of the institution offering the courses | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications between students and faculty | ○ | ○ | ○ | ○ | ○ |
| Privacy of communications among students | ○ | ○ | ○ | ○ | ○ |
| Access to information (resource materials) | ○ | ○ | ○ | ○ | ○ |
| On-campus exams | ○ | ○ | ○ | ○ | ○ |
| More time required to complete coursework | ○ | ○ | ○ | ○ | ○ |
| More commuting time to and from classes | ○ | ○ | ○ | ○ | ○ |

| | | | | | |
|---|---|---|---|---|---|
| Schedule flexibility to accommodate work responsibilities | ○ | ○ | ○ | ○ | ○ |
| Schedule flexibility to accommodate social activities | ○ | ○ | ○ | ○ | ○ |
| Ability to secure employment after graduation | ○ | ○ | ○ | ○ | ○ |

**9. My overall attitude toward on-line education is:**

| *1=Very Favorable* | *2* | *3* | *4* | *5=Very Unfavorable* |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

**10. What is your prediction for the future of on-line education?**

# APPENDIX D: INTERVIEW PROTOCOL

Part A: Student Participants

Opening Statement: Thank you for agreeing to participate in this interview. This interview is intended to gain additional insight into the survey responses that your group provided regarding the perceptions of online education. Any responses you provide are completely anonymous and no personal identifiable data will be used at any stage of this study. This interview will take approximately 20 minutes.

Interview Questions

1. What do you believe is the most important factor that motivates students to take on-line courses?
    a. Was this factor the primary motivations for you to enroll in the MBA online program?
    b. Why or why not?
2. What do you believe is the most important factor in discouraging students from taking on-line courses?
    a. Was this factor of concern to you when you enrolled in the MBA online program?
    b. Why or why not?
    c. Did you find this factor to be a real issue during the course of your MBA online program?
    d. Why or why not?
3. What do you believe will be the future of education regarding the methods and mechanisms of course delivery?
    a. Do you think it is likely that more MBA programs will be offered online in the future?
    b. Why or why not?
4. Assuming you had a choice, and based on what you know now about online education, would you take this program in an online setting again?

a. Would you take this program in a different format (e.g. traditional face-to-face, part-time accelerated etc)?

b. Why would you choose that format?

5. Are there any other comments that you would like to share regarding your experience with online course-work?

Thank you for your time.

Part B: Faculty Participants

Opening Statement: Thank you for agreeing to participate in this interview. This interview is intended to gain additional insight into the survey responses that your group provided regarding the perceptions of online education. Any responses you provide are completely anonymous and no personal identifiable data will be used at any stage of this study. This interview will take approximately 20 minutes.

1. What do you believe is the most important factor that motivates students to take on-line courses?

2. What do you believe is the most important factor that discourages students from taking online courses?

3. What do you believe is the most important factor in motivating faculty to teach on-line courses?

   a. Was this factor the primary motivation for you to teach in the MBA online program?

   b. Why or why not?

4. What do you believe is the most important factor in motivating faculty not to teach on-line courses?

   a. Was this factor of concern to you when you first decided to teach in the MBA online program?

   b. Why or why not?

   c. Did you find this factor to be a real issue while you taught in the MBA online program?

   d. Why or why not?

5. What do you believe will be the future of education regarding the methods and mechanisms of course delivery?

   a. Do you think it is likely that more MBA programs will be offered online in the future?

   b. Why or why not?

6. How would you characterize your opinion of on-line courses?

7. Assuming you had a choice and based on what you know now about online education, would you teach in an online setting again?

   a. Why or why not?

8. Are there any other comments that you would like to share regarding your experience with online course-work?

Thank you for your time

<u>Part C: Program Director, MBA Online</u>

1. What do you believe is the most important factor in motivating people to take on-line courses?

2. What do you believe is the most important factor in motivating people to not take on-line courses?

3. What do you believe is the most important factor in motivating faculty to teach on-line courses?

4. What do you believe is the most important factor in motivating faculty not to teach on-line courses?

5. What do you believe will be the future of education regarding the methods and mechanisms of course delivery?

   a. Do you think it is likely that more MBA programs will be offered online in the future?

   b. Why or why not?

6. Do you believe that a graduate of an MBA online program has an equal chance of gaining employment compared to a graduate of a traditional (face-to-face) MBA program?

   a. Why or why not?

7. How would you characterize your opinion of on-line courses?

8. What is your vision of online learning and to what extend does the MBA program meet this vision?

Part D: Director of Instructional Design

1. What do you believe is the most important factor in motivating people to take on-line courses?

2. What do you believe is the most important factor that discourages people from taking on-line courses?

3. What do you believe is the most important factor in motivating faculty to teach on-line courses?

4. What do you believe is the most important factor in discouraging faculty from teaching on-line courses?

5. What do you believe will be the future of education regarding the methods and mechanisms of course delivery?

   a. Do you think it is likely that more MBA programs will be offered online in the future?

   b. Why or why not?

6. Do you believe that a graduate of an MBA online program has an equal chance of gaining employment compared to a graduate of a traditional (face-to-face) MBA program?

   a. Why or why not?

7. How would you characterize your opinion of on-line courses?

8. What is your vision of online learning and to what extend does the MBA program meet this vision?

Part E: Dean

1. What do you believe is the most important factor in motivating people to take on-line courses?

2. What do you believe is the most important factor that discourages people from taking on-line courses?

3. What do you believe is the most important factor in motivating faculty to teach on-line courses?

4. What do you believe is the most important factor in discouraging faculty from teaching on-line courses?

5. Do you believe that a graduate of an MBA online program has an equal chance of gaining employment compared to a graduate of a traditional (face-to-face) MBA program?

    a. Why or why not?

6. What would you say to a faculty member who is concerned regarding the workload associated with the teaching and development of online courses?

7. How would you characterize your opinion of on-line courses?

8. What do you believe will be the future of education regarding the methods and mechanisms of course delivery?

    a. Do you think it is likely that more business programs will be offered online in the future?

    b. Why or why not?

9. What is your vision of online learning and to what extend does the MBA program meet this vision?

# APPENDIX E:FACULTY T-TEST RESULTS

Independent-samples t-tests were conducted in order to compare the overall attitude means for the selected faculty groups (full-time, part-time, student experience, no student experience). No statistically significant difference was found for the means of full-time faculty (M=2.28, SD=1.18;t (41)=.30, p=.76 (two-tailed), part-time faculty (M=2.6, SD=1.14; t(28)=.36, p=.75 (two-tailed)  faculty with no student experience (M=2.65, SD=1.22; t(40)=.62, p=.51 (two-tailed) and for the faculty with student experience (M=1.67, SD=.82; t(29)=1.39, p=.1.75.

# VITA

Nikolaos Linardopoulos is an Assistant Teaching Professor at the Goodwin College of Professional Studies at Drexel University. Mr. Linardopoulos has a BA in Political Science and English from McGill University and an MS in Communication from Drexel University. His research and teaching interests focus on the areas of communication education, professional communication, sports communication and online education. Mr. Linardopoulos has developed and taught a significant number of online courses. He has published and presented in national and international conferences regarding his experiences with online teaching and learning. Mr. Linardopoulos was the recipient of 2009 Outstanding Online Instructor Award at Drexel University.